Air Quality Assessment

D&B Truck & Equipment Sales, LLC
(AI# 163173)

Prepared with the assistance of

DCA
Kentucky Division of Compliance Assistance

Process Description and Emission Calculations
D&B Truck & Equipment Sales, LLC (AI# 163173)

Process Description

D&B Truck & Equipment Sales, LLC sells used construction equipment along with straight trucks and tractor trailers. The facility rebuilds and refurbishes semi-trucks, which includes some painting and welding. The site includes a complete service department and is currently located in an industrial facility in Barren County, KY.

Truck and dump beds are delivered via truck to the lot located at 1059 Glover Road. The equipment is taken to a wash bay and cleaned using Big Red Dynomite or Foam & Shine Steel cleaner. After the equipment has been washed and if necessary it is taken to the wielding shop. The facility has a GMAW Miller 252 MIG welder onsite that uses Viking welding wire.

The equipment is then taken to the spray booth and painted with Rust-Oleum spray paint using a HVLP pneumatic spray gun. The booth is equipped with two 30 x 30 exhaust fans with Hart Cooley 20 x 20 filters. Comfort heating for the facility is provided by a Carrier Weather Maker gas heat/electric cooling unit which uses natural gas for heating.

Emission Calculations

EP01-1 – Spray Coating Booth – Topcoat (Spray Gun)

- Throughput: 9.38E-01 gal/hr
- Emission Factor Source: SDS
- Control: Fabric Filter, Transfer Efficiency
    - Particulate matter control of 90% assumed for filters
    - Transfer Efficiency of 60% assumed for particulate matter

EP01-2 – Spray Coating Booth – Topcoat (Aerosol Spray Can)

- Throughput: 3.85E-03
- Emission Factor Source: SDS
- Control: Fabric Filter, Transfer Efficiency
    - Particulate matter control of 90% assumed for filters
    - Transfer Efficiency of 60% assumed for particulate matter

EP02 – Spray Gun Cleanout

- Throughput: 3.42E-01 gal/hr
- Emission Factor Source: SDS
- Control: None

IA01 – Parts Washing

- Throughput: 7.53E-02 gal/hr
- Emission Factor Source: SDS Worst Case
- Control: Enclosure
    - Assume no control for pollutants.

IA02 – GMA Welding

- Throughput: 2.44E-04 ton/hr
- Emission Factor Source: PM: AP-42 Ch. 12.19; HAPs: SDS worst case % by weight
- Control: Enclosure (with doors open)
    - Control of 50% assumed

IA03 –Natural Gas Comfort Heater

- Throughput 4.00E-01 MMBtu/hr
- Emission Factor Source: AP-42 Ch. 1.4
- Control: None Known
- Notes: Assumed to only be used during winter months (50% of year)

IA04 – Haul Road (Concrete)

- Throughput: 1.33 tons/hr
- Emission Factor Source: DAQ Minerals Section
- Control: None Known

IA05 – Haul Road (Unpaved)

- Throughput: 1.33 tons/hr
- Emission Factor Source: DAQ Minerals Section
- Control: None known

<u>Potentially Applicable Regulations</u>

- 401 KAR 59:010 - New process operations
- 401 KAR 63:020 - Potentially hazardous matter or toxic substances
- 401 KAR 63:010 - Fugitive emissions

<u>Non-applicable Regulations:</u>

- 40 CFR 63 Subpart HHHHHH
    - Facility coatings do not contain target HAPs.
- 40 CFR 63 Subpart XXXXXX
    - Facility does not fall under one of the nine source categories.

Recommendation

Based on potential emission calculations and applicable requirements, the Kentucky Division of Compliance Assistance is recommending that D&B Truck Equipment & Sales, LLC file an application for a ***Federally Enforceable State Operating Permit (FESOP)***. Facility-wide emissions are included below.

Facility-wide Emissions

Pollutant	Uncontrolled TPY	Controlled TPY	Requested Limit
PM	6.93	7.11E-01	
PM_{10}	6.91	6.99E-01	
VOC	22.38	22.38	
SO_2	5.15E-04	5.15E-04	
NOx	8.58E-02	8.58E-02	
CO	7.22E-02	7.22E-02	
Lead	4.29E-07	4.29E-07	
Benzene	1.80E-06	1.80E-06	
Toluene	2.01	2.01	
Ethylbenzene	3.91	3.91	
Xylene	19.76	19.76	9
Cumene	4.45E-01	4.45E-01	
Chromium	8.35E-06	4.18E-06	
Manganese	1.03E-04	5.15E-05	
Nickel	8.35E-06	4.18E-06	
Methanol	5.04E-02	5.04E-02	
Napthalene	3.94E-01	3.94E-01	
Hydrofluoric Acid	1.75E-01	1.75E-01	
CO_2	103.06	103.06	
Methane	1.97E-03	1.97E-03	
N_2O	1.89E-03	1.89E-03	
HAP Total	26.74	26.74	22.5

Division for Air Quality

300 Sower Boulevard

Frankfort, KY 40601

(502) 564-3999

DEP7007AI

Administrative Information

___ Section AI.1: Source Information

___ Section AI.2: Applicant Information

___ Section AI.3: Owner Information

___ Section AI.4: Type of Application

___ Section AI.5: Other Required Information

___ Section AI.6: Signature Block

___ Section AI.7: Notes, Comments, and Explanations

Additional Documentation

___ Additional Documentation attached

Source Name: **D&B Truck & Equipment Sales LLC**

KY EIS (AFS) #: **21-**

Permit #:

Agency Interest (AI) ID: **163173**

Date: **2/10/2020**

Section AI.1: Source Information

Physical Location Address:	**Street:**	1059 Glover Road				
	City:	Glasgow	**County:**	Barren	**Zip Code:**	42141
Mailing Address:	**Street or P.O. Box:**	1401 Burkesville Road				
	City:	Glasgow	**State:**	KY	**Zip Code:**	42141

Standard Coordinates for Source Physical Location

Longitude: -85.834443 (decimal degrees) **Latitude:** 36.92599 (decimal degrees)

Primary (NAICS) Category: Motor Vehicle Body Manufacturing **Primary NAICS #:** 336211

Classification (SIC) Category: Truck and Bus Bodies **Primary SIC #:** 3713

Briefly discuss the type of business conducted at this site: D&B Truck & Equipment Sales, LLC is a facility that sells used construction equipment along with straight trucks and tractor trailers. The facility also rebuilds and refurbishes semi-trucks which includes some painting and welding.

Description of Area Surrounding Source:
- ☑ Rural Area
- ☑ Industrial Park
- ☐ Residential Area
- ☐ Urban Area
- ☐ Industrial Area
- ☐ Commercial Area

Is any part of the source located on federal land? ☐ Yes ☑ No

Number of Employees: 14

Approximate distance to nearest residence or commercial property: *0.07 miles* **Property Area:** 80 acres **Is this source portable?** ☐ Yes ☑ No

What other environmental permits or registrations does this source currently hold or need to obtain in Kentucky?

NPDES/KPDES:	☐ Currently Hold	☑ Need	☐ N/A
Solid Waste:	☐ Currently Hold	☐ Need	☑ N/A
RCRA:	☐ Currently Hold	☐ Need	☑ N/A
UST:	☐ Currently Hold	☐ Need	☑ N/A

Type of Regulated Waste Activity:
- ☐ Mixed Waste Generator
- ☐ Generator
- ☐ Recycler
- ☐ Other: _____
- ☐ U.S. Importer of Hazardous Waste
- ☐ Transporter
- ☐ Treatment/Storage/Disposal Facility
- ☑ N/A

Section AI.2: Applicant Information

Applicant Name: D&B Truck & Equipment Sales LLC

Title: (if individual)

Mailing Address:
Street or P.O. Box: 1059 Glover Road
City: Glasgow **State:** KY **Zip Code:** 42141

Email: (if individual)

Phone: 270-659-9433

Technical Contact

Name: Erich Cleaver (Division of Compliance Assistance)

Title: Environmental Scientist II

Mailing Address:
Street or P.O. Box: 300 Sower Blvd.
City: Frankfort **State:** KY **Zip Code:** 40601

Email: Erich.Cleaver@ky.gov

Phone: 502-782-6920

Air Permit Contact for Source

Name: Linda Clark

Title: Co-Owner

Mailing Address:
Street or P.O. Box: 1401 Burkesville Road
City: Glasgow **State:** KY **Zip Code:** 42141

Email: dbtrucking@scrtc.com

Phone: 270-659-9433

Section AI.3: Owner Information

☑ **Owner same as applicant**

Name:

Title:

Mailing Address: **Street or P.O. Box:**

City: **State:** **Zip Code:**

Email:

Phone:

List names of owners and officers of the company who have an interest in the company of 5% or more.

Name	Position
Dale Clark	Co-Owner 50%
Brenda Clark	Co-Owner 50%

Section AI.4: Type of Application

Current Status: ☐ Title V ☐ Conditional Major ☐ State-Origin ☐ General Permit ☐ Registration ☑ None

Requested Action: *(check all that apply)*

- ☐ Name Change
- ☐ Renewal Permit
- ☐ 502(b)(10)Change
- ☐ Revision
- ☐ Ownership Change
- ☐ Initial Registration
- ☐ Revised Registration
- ☐ Extension Request
- ☐ Off Permit Change
- ☐ Closure
- ☐ Significant Revision
- ☐ Minor Revision
- ☐ Addition of New Facility
- ☐ Landfill Alternate Compliance Submittal
- ☐ Administrative Permit Amendment
- ☑ Initial Source-wide OperatingPermit
- ☐ Portable Plant Relocation Notice
- ☐ Modification of Existing Facilities

Requested Status: ☐ Title V ☑ Conditional Major ☐ State-Origin ☐ PSD ☐ NSR ☐ Other:

Is the source requesting a limitation of potential emissions? ☑ Yes ☐ No

Pollutant:	Requested Limit:	Pollutant:	Requested Limit:
☐ Particulate Matter		☑ Single HAP	9 tons/yr
☐ Volatile Organic Compounds (VOC)		☑ Combined HAPs	22.5 tons/yr
☐ Carbon Monoxide		☐ Air Toxics (40 CFR 68, Subpart F)	
☐ Nitrogen Oxides		☐ Carbon Dioxide	
☐ Sulfur Dioxide		☐ Greenhouse Gases (GHG)	
☐ Lead		☐ Other	

For New Construction:

Proposed Start Date of Construction: *(MM/YYYY)* Existing

Proposed Operation Start-Up Date: *(MM/YYYY)* Existing

For Modifications:

Proposed Start Date of Modification: *(MM/YYYY)* N/A

Proposed Operation Start-Up Date: *(MM/YYYY)* N/A

Applicant is seeking coverage under a permit shield. ☐ **Yes** ☑ **No**

Identify any non-applicable requirements for which permit shield is sought on a separate attachment to the application.

Section AI.5 Other Required Information

Indicate the documents attached as part of this application:

- ☐ DEP7007A Indirect Heat Exchangers and Turbines
- ☐ DEP7007B Manufacturing or Processing Operations
- ☐ DEP7007C Incinerators and Waste Burners
- ☐ DEP7007F Episode Standby Plan
- ☐ DEP7007J Volatile Liquid Storage
- ☑ DEP7007K Surface Coating or Printing Operations
- ☐ DEP7007L Mineral Processes
- ☐ DEP7007M Metal Cleaning Degreasers
- ☑ DEP7007N Source Emissions Profile
- ☐ DEP7007P Perchloroethylene Dry Cleaning Systems
- ☐ DEP7007R Emission Offset Credit
- ☐ DEP7007S Service Stations
- ☐ DEP7007T Metal Plating and Surface Treatment Operations
- ☑ DEP7007V Applicable Requirements and Compliance Activities
- ☐ DEP7007Y Good Engineering Practice and Stack Height Determination
- ☐ DEP7007AA Compliance Schedule for Non-complying Emission Units
- ☐ DEP7007BB Certified Progress Report
- ☐ DEP7007CC Compliance Certification
- ☑ DEP7007DD Insignificant Activities
- ☐ DEP7007EE Internal Combustion Engines
- ☐ DEP7007FF Secondary Aluminum Processing
- ☑ DEP7007GG Control Equipment
- ☑ DEP7007HH Haul Roads
- ☐ Confidentiality Claim
- ☐ Ownership Change Form
- ☑ Secretary of State Certificate
- ☑ Flowcharts or diagrams depicting process
- ☐ Digital Line Graphs (DLG) files of buldings, roads, etc.
- ☑ Site Map
- ☐ Map or drawing depicting location of facility
- ☑ Safety Data Sheet (SDS)
- ☐ Emergency Response Plan
- ☐ Other: _____

Section AI.6: Signature Block

I, the undersigned, hereby certify under penalty of law, that I am a responsible official*, and that I have personally examined, and am familiar with, the information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the information is on knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false or incomplete information, including the possibility of fine or imprisonment.

Dale Clark
Authorized Signature

3-16-20
Date

Dale Clark
Type or Printed Name of Signatory

Owner
Title of Signatory

*Responsible official as defined by 401 KAR 52:001.

Section AI.7: Notes, Comments, and Explanations

Division for Air Quality

300 Sower Boulevard
Frankfort, KY 40601
(502) 564-3999

DEP7007N

Source Emissions Profile

__ Section N.1: Emission Summary
__ Section N.2: Stack Information
__ Section N.3: Fugitive Information
__ Section N.4: Notes, Comments, and Explanations

Additional Documentation

___ Complete DEP7007AI

Source Name: D&B Truck & Equipment Sales, LLC
KY EIS (AFS) #: 21-
Permit #:
Agency Interest (AI) ID: 163173
Date: 2/10/2020

N.1: Emission Summary

Emission Unit #	Emission Unit Name	Process ID	Process Name	Control Device Name	Control Device ID	Stack ID	Maximum Design Capacity *(SCC Units/hour)*	Pollutant	Uncontrolled Emission Factor *(lb/SCC Units)*	Emission Factor Source (e.g. AP-42, Stack Test, Mass Balance)	Capture Efficiency *(%)*	Control Efficiency *(%)*	Hourly Emissions		Annual Emissions	
													Uncontrolled Potential *(lb/hr)*	Controlled Potential *(lb/hr)*	Uncontrolled Potential *(tons/yr)*	Controlled Potential *(tons/yr)*
EP-01	Spray Coating Booth - Topcoat	1	Spray Gun	Filter	1	1	9.38E-01 gal/hr	PM	1.68	SDS	100.00%	90.00%	1.57	1.57E-01	6.89	6.89E-01
								PM10	1.68	SDS	100.00%	90.00%	1.57	1.57E-01	6.89	6.89E-01
								VOC	5.41	SDS	0.00%	0.00%	5.07	5.07	22.20	22.20
								Ethylbenzene	9.50E-01	SDS	0.00%	0.00%	8.91E-01	8.91E-01	3.90	3.90
								Xylene	4.81	SDS	0.00%	0.00%	4.51	4.51	19.75	19.75
								Cumene	1.06E-01	SDS	0.00%	0.00%	9.90E-02	9.90E-02	4.34E-01	4.34E-01
								Toluene	4.80E-01	SDS	0.00%	0.00%	4.50E-01	4.50E-01	1.97	1.97
								Napthalene	9.60E-02	SDS	0.00%	0.00%	9.00E-02	9.00E-02	3.94E-01	3.94E-01

Emission Unit #	Emission Unit Name	Process ID	Process Name	Control Device Name	Control Device ID	Stack ID	Maximum Design Capacity *(SCC Units/hour)*	Pollutant	Uncontrolled Emission Factor *(lb/SCC Units)*	Emission Factor Source (e.g. AP-42, Stack Test, Mass Balance)	Capture Efficiency *(%)*	Control Efficiency *(%)*	Hourly Emissions		Annual Emissions	
													Uncontrolled Potential *(lb/hr)*	Controlled Potential *(lb/hr)*	Uncontrolled Potential *(tons/yr)*	Controlled Potential *(tons/yr)*
EP-01	Spray Coating Booth - Topcoat	2	Aerosol Spray Can	Filter	1	1	3.85E-03 gal/hr	PM	8.32E-01	SDS	100.00%	90.00%	3.21E-03	3.21E-04	1.40E-02	1.40E-03
								PM10	8.32E-01	SDS	100.00%	90.00%	3.21E-03	3.21E-04	1.40E-02	1.40E-03
								VOC	4.40	SDS	0.00%	0.00%	1.70E-02	1.70E-02	7.43E-02	7.43E-02
								Ethylbenzene	1.62E-01	SDS	0.00%	0.00%	6.24E-04	6.24E-04	2.73E-03	2.73E-03
								Xylene	6.48E-01	SDS	0.00%	0.00%	2.50E-03	2.50E-03	1.09E-02	1.09E-02
EP02	Spray Gun Cleanout	N/A	N/A	N/A	N/A	N/A	3.42E-03 gal/hr	VOC	6.72	SDS	0.00%	0.00%	2.30E-02	2.30E-02	1.01E-01	1.01E-01
								Methanol	3.36	SDS	0.00%	0.00%	1.15E-02	1.15E-02	5.04E-02	5.04E-02
								Toluene	2.35	SDS	0.00%	0.00%	8.05E-03	8.05E-03	3.53E-02	3.53E-02
IA01	Parts Washing	N/A	N/A	N/A	N/A	N/A	7.53E-02 gal/hr	Cumene	3.40E-02	SDS	0.00%	0.00%	2.56E-03	2.56E-03	1.12E-02	1.12E-02
								Hydrofluoric Acid	5.31E-01	SDS	0.00%	0.00%	4.00E-02	4.00E-02	1.75E-01	1.75E-01
IA02	GMA Welding	N/A	N/A	Enclosed	2	N/A	2.44E-04 tons/hr	PM	5.20	AP-42 Chap 12.19	50.00%	50.00%	1.27E-03	6.36E-04	5.57E-03	2.78E-03
								PM10	5.20	AP-42 Chap 12.19	50.00%	50.00%	1.27E-03	6.36E-04	5.57E-03	2.78E-03
								Chromium	7.80E-03	SDS	50.00%	50.00%	1.91E-06	9.53E-07	8.35E-06	4.18E-06
								Manganese	9.62E-02	SDS	50.00%	50.00%	2.35E-05	1.18E-05	1.03E-04	5.15E-05
								Nickel	7.80E-03	SDS	50.00%	50.00%	1.91E-06	9.53E-07	8.35E-06	4.18E-06

Emission Unit #	Emission Unit Name	Process ID	Process Name	Control Device Name	Control Device ID	Stack ID	Maximum Design Capacity *(SCC Units/hour)*	Pollutant	Uncontrolled Emission Factor *(lb/SCC Units)*	Emission Factor Source (e.g. AP-42, Stack Test, Mass Balance)	Capture Efficiency *(%)*	Control Efficiency *(%)*	Hourly Emissions		Annual Emissions	
													Uncontrolled Potential *(lb/hr)*	Controlled Potential *(lb/hr)*	Uncontrolled Potential *(tons/yr)*	Controlled Potential *(tons/yr)*
IA03	Natural Gas Comfort Heater	N/A	N/A	N/A	N/A	N/A	4.00E-01 MMBtu/hr	PM	7.45E-03	AP-42 Chap 1.4	0.00%	0.00%	2.98E-03	2.98E-03	6.53E-03	6.53E-03
								PM10	1.86E-03	AP-42 Chap 1.4	0.00%	0.00%	7.44E-04	7.44E-04	1.63E-03	1.63E-03
								VOC	5.39E-03	AP-42 Chap 1.4	0.00%	0.00%	2.16E-03	2.16E-03	4.72E-03	4.72E-03
								SO2	5.88E-04	AP-42 Chap 1.4	0.00%	0.00%	2.35E-04	2.35E-04	5.15E-04	5.15E-04
								NOx	9.80E-02	AP-42 Chap 1.4	0.00%	0.00%	3.92E-02	3.92E-02	8.58E-02	8.58E-02
								CO	8.24E-02	AP-42 Chap 1.4	0.00%	0.00%	3.30E-02	3.30E-02	7.22E-02	7.22E-02
								Lead	4.90E-07	AP-42 Chap 1.4	0.00%	0.00%	1.96E-07	1.96E-07	4.29E-07	4.29E-07
								Benzene	2.06E-06	AP-42 Chap 1.4	0.00%	0.00%	8.24E-07	8.24E-07	1.80E-06	1.80E-06
								Toluene	3.33E-06	AP-42 Chap 1.4	0.00%	0.00%	1.33E-06	1.33E-06	2.92E-06	2.92E-06
								Methane	2.25E-03	AP-42 Chap 1.4	0.00%	0.00%	9.00E-04	9.00E-04	1.97E-03	1.97E-03
								N2O	2.16E-03	AP-42 Chap 1.4	0.00%	0.00%	8.64E-04	8.64E-04	1.89E-03	1.89E-03
								CO2	117.65	AP-42 Chap 1.4	0.00%	0.00%	47.06	47.06	103.06	103.06
IA04	Haul Road (Paved)	N/A	N/A	N/A	N/A	N/A	1.33 tons/hr	PM	3.12E-02	DAQ Minerals Section	90.00%	90.00%	1.07E-04	1.07E-05	4.68E-04	4.68E-05
								PM10	1.81E-02	DAQ Minerals Section	90.00%	90.00%	6.21E-05	6.21E-06	2.72E-04	2.72E-05
IA05	Haul Road (Unpaved)	N/A	N/A	N/A	N/A	N/A	1.33 tons/hr	PM	7.80E-01	DAQ Minerals Section	0.00%	0.00%	2.67E-03	2.67E-03	1.17E-02	1.17E-02
								PM10	2.81E-01	DAQ Minerals Section	0.00%	0.00%	9.62E-04	9.62E-04	4.21E-03	4.21E-03

Section N.2: Stack Information

UTM Zone:

Stack ID	Identify all Emission Units (with Process ID) and Control Devices that Feed to Stack	Stack Physical Data			Stack UTM Coordinates		Stack Gas Stream Data		
		Equivalent Diameter *(ft)*	Height *(ft)*	Base Elevation *(ft)*	Northing *(m)*	Easting *(m)*	Flowrate *(acfm)*	Temperature *(° F)*	Exit Velocity *(ft/sec)*
01	EP01-1 - Spray Booth (Spray Gun) EP01-2 Spray Booth (Aerosol Can) EP02 - Spray Gun Cleanout	2.50	3.88	727	4087198	603764	3950 cfm	70° F	Unknwon

Section N.3: Fugitive Information

UTM Zone:

Emission Unit #	Emission Unit Name	Process ID	Area Physical Data		Area UTM Coordinates		Area Release Data	
			Length of the X Side *(ft)*	Length of the Y Side *(ft)*	Northing *(m)*	Easting *(m)*	Release Temperature *(°F)*	Release Height *(ft)*
IA04	Haul Road Paved	N/A	3168.00	20.81	4087306	603333	70	10
IA05	Haul Road Unpaved	N/A	7920	31.05	4087153	603702	70	10

Section N.4: Notes, Comments, and Explanations

Division for Air Quality

300 Sower Boulevard

Frankfort, KY 40601

(502) 564-3999

DEP7007V

Applicable Requirements and Compliance Activities

___ Section V.1: Emission and Operating Lir
___ Section V.2: Monitoring Requir
___ Section V.3: Recordkeeping Re
___ Section V.4: Reporting Require
___ Section V.5: Testing Requireme
___ Section V.6: Notes, Comments, and Expl

Additional Documentation

___ Complete DEP7007AI

Source Name: **D&B Turck Equipment & Sales**

KY EIS (AFS) #: 21-

Permit #:

Agency Interest (AI) ID: **163173**

Date: **2/10/2020**

Section V.1: Emission and Operating Limitation(s)

Emission Unit #	Emission Unit Description	Applicable Regulation or Requirement	Pollutant	Emission Limit (if applicable)	Voluntary Emission Limit or Exemption (if applicable)	Operating Requirement or Limitation (if applicable)	Method of Determining Compliance with the Emission and Operating Requirement(s)
EP01-1	Spray Booth - Topcoat (Spray Gun)	401 KAR 59:010	PM PM10 VOC	N/A	N/A	No person shall cause, suffer, allow, or permit any continuous emission into the open air from a control device or stack associated with any affected facility which is equal to or greater than twenty (20) percent opacity	Visual determinations of fugitive emissions and opacity

Emission Unit #	Emission Unit Description	Applicable Regulation or Requirement	Pollutant	Emission Limit (if applicable)	Voluntary Emission Limit or Exemption (if applicable)	Operating Requirement or Limitation (if applicable)	Method of Determining Compliance with the Emission and Operating Requirement(s)
EP01-1	Spray Booth - Topcoat (Spray Gun)	401 KAR 63:020	Toluene Ethylbenze Xylene Cumene Napthalene	10	9	Persons responsible for a source from which hazardous matter or toxic substances may be emitted shall provide the utmost care and consideration, in the handling of these materials, to the potentially harmful effects of the emissions resulting from such activities. No owner or operator shall allow any affected facility to emit potentially hazardous matter or toxic substances in such quantities or duration as to be harmful to the health and welfare of humans, animals, and plants	Monthly record or rolling total of materials used

Emission Unit #	Emission Unit Description	Applicable Regulation or Requirement	Pollutant	Emission Limit (if applicable)	Voluntary Emission Limit or Exemption (if applicable)	Operating Requirement or Limitation (if applicable)	Method of Determining Compliance with the Emission and Operating Requirement(s)
EP01-2	Spray Booth - Topcoat (Aerosol Spray Can)	401 KAR 59:010	PM PM10 VOC	N/A	N/A	No person shall cause, suffer, allow, or permit any continuous emission into the open air from a control device or stack associated with any affected facility which is equal to or greater than twenty (20) percent opacity	Visual determinations of fugitive emissions and opacity
EP01-2	Spray Booth - Topcoat (Aerosol Spray Can)	401 KAR 63:020	Ethylbenzene Xylene	N/A	N/A	Persons responsible for a source from which hazardous matter or toxic substances may be emitted shall provide the utmost care and consideration, in the handling of these materials, to the potentially harmful effects of the emissions resulting from such activities. No owner or operator shall allow any affected facility to emit potentially hazardous matter or toxic substances in such quantities or duration as to be harmful to the health and welfare of humans, animals, and plants	Monthly record or rolling total of materials used
EP02	Spray Gun Cleanout	401 KAR 59:010	VOC	N/A	N/A	No person shall cause, suffer, allow, or permit any continuous emission into the open air from a control device or stack associated with any affected facility which is equal to or greater than twenty (20) percent opacity	Visual determinations of fugitive emissions and opacity
EP02	Spray Gun Cleanout	401 KAR 63:020	Methanol Toluene	10	9	Persons responsible for a source from which hazardous matter or toxic substances may be emitted shall provide the utmost care and consideration, in the handling of these materials, to the potentially harmful effects of the emissions resulting from such activities. No owner or operator shall allow any affected facility to emit potentially hazardous matter or toxic substances in such quantities or duration as to be harmful to the health and welfare of humans, animals, and plants	Monthly record or rolling total of materials used

Emission Unit #	Emission Unit Description	Applicable Regulation or Requirement	Pollutant	Emission Limit (if applicable)	Voluntary Emission Limit or Exemption (if applicable)	Operating Requirement or Limitation (if applicable)	Method of Determining Compliance with the Emission and Operating Requirement(s)
IA01	Parts Washing	401 KAR 63:020	Cumene Hydrofluoric Acid	N/A	N/A	Persons responsible for a source from which hazardous matter or toxic substances may be emitted shall provide the utmost care and consideration, in the handling of these materials, to the potentially harmful effects of the emissions resulting from such activities. No owner or operator shall allow any affected facility to emit potentially hazardous matter or toxic substances in such quantities or duration as to be harmful to the health and welfare of humans, animals, and plants	Monthly record or rolling total of materials used
IA02	GMA Welding	401 KAR 59:010	PM PM10	N/A	N/A	No person shall cause, suffer, allow, or permit any continuous emission into the open air from a control device or stack associated with any affected facility which is equal to or greater than twenty (20) percent opacity	Visual determinations of fugitive emissions and opacity
IA02	GMA Welding	401 KAR 63:020	Chromium Hex Chrom	N/A	N/A	Persons responsible for a source from which hazardous matter or toxic substances may be emitted shall provide the utmost care and consideration, in the handling of these materials, to the potentially harmful effects of the emissions resulting from such activities. No owner or operator shall allow any affected facility to emit potentially hazardous matter or toxic substances in such quantities or duration as to be harmful to the health and welfare of humans, animals, and plants	Monthly record or rolling total of materials used

Emission Unit #	Emission Unit Description	Applicable Regulation or Requirement	Pollutant	Emission Limit (if applicable)	Voluntary Emission Limit or Exemption (if applicable)	Operating Requirement or Limitation (if applicable)	Method of Determining Compliance with the Emission and Operating Requirement(s)
IA03	Natural Gas Comfort Heater	401 KAR 59:010	PM PM10 VOC SO_2 NOx CO CO_2 N_2O Methane	N/A	N/A	No person shall cause, suffer, allow, or permit any continuous emission into the open air from a control device or stack associated with any affected facility which is equal to or greater than twenty (20) percent opacity	Visual determinations of fugitive emissions and opacity
IA03	Natural Gas Comfort Heater	401 KAR 63:020	Benzene Toluene Lead	N/A	N/A	Persons responsible for a source from which hazardous matter or toxic substances may be emitted shall provide the utmost care and consideration, in the handling of these materials, to the potentially harmful effects of the emissions resulting from such activities. No owner or operator shall allow any affected facility to emit potentially hazardous matter or toxic substances in such quantities or duration as to be harmful to the health and welfare of humans, animals, and plants	Visual determinations of fugitive emissions and opacity
IA04	Haul Road Paved	401 KAR 63:010	PM PM10	N/A	N/A	No person shall cause, suffer, or allow any material to be handled, processed, transported, or stored; a building or its appurtenances to be constructed, altered, repaired, or demolished, or a road to be used without taking reasonable precaution to prevent particulate matter from becoming airborne.	Visual determinations of fugitive emissions and opacity
IA05	Haul Road Unpaved	401 KAR 63:010	PM PM10	N/A	N/A	No person shall cause, suffer, or allow any material to be handled, processed, transported, or stored; a building or its appurtenances to be constructed, altered, repaired, or demolished, or a road to be used without taking reasonable precaution to prevent particulate matter from becoming airborne.	Visual determinations of fugitive emissions and opacity

Section V.2: Monitoring Requirements

Emission Unit #	Emission Unit Description	Pollutant	Applicable Regulation or Requirement	Parameter Monitored	Description of Monitoring
EP01-1	Spray Coating Booth - Spray Gun	PM PM10 VOC	401 KAR 59:010	PM PM10 VOC	Visual determination of fugitive emissions and opacity
EP01-1	Spray Coating Booth - Spray Gun	Ethylbenzene Xylene Cumene Toluene Napthalene	401 KAR 63:020	Ethylbenzen Xylene Cumene Toluene Napthalene	Monthly record or rolling total of materials used
EP01-2	Spray Coating Booth - Aerosol Spray Can	PM PM10 VOC	401 KAR 59:010	PM PM10 VOC	Visual determination of fugitive emissions and opacity
EP01-2	Spray Coating Booth - Aerosol Spray Can	Ethylbenzene Xylene	401 KAR 63:020	Ethylbenzene Xylene	Monthly record or rolling total of materials used
EP02	Spray Gun Cleanout	VOC	401 KAR 59:010	VOC	Visual determination of fugitive emissions and opacity
EP02	Spray Gun Cleanout	Methanol Toluene	401 KAR 63:020	Methanol Toluene	Monthly record or rolling total of materials used
IA01	Parts Washing	Cumene Hydrofluoric Acid	401 KAR 63:020	Cumene Hydrofluoric Acid	Monthly record or rolling total of materials used
IA02	GMA Welding	PM PM10	401 KAR 59:010	PM PM10	Visual determination of fugitive emissions and opacity
IA02	GMA Welding	Chromium Hex Chrom Cobalt Manganese Nickel	401 KAR 63:020	Chromium Hex Chrom Cobalt Manganese Nickel	Monthly record or rolling total of materials used
IA03	Natural Gas Comfort Heater	PM PM10 VOC SO_2 NOx CO CO_2 N_2O Methane	401 KAR 59:010	PM PM10 VOC SO_2 NOx CO CO_2 N_2O Methane	Visual determination of fugitive emissions and opacity
IA03	Natural Gas Comfort Heater	Benzene Toluene Lead	401 KAR 63:020	Benzene Toluene Lead	Monthly record or rolling total of materials used
IA04	Haul Road Paved	PM PM10	401 KAR 63:010	PM PM10	Visual determination of fugitive emissions and opacity
IA05	Haul Road Unpaved	PM PM10	401 KAR 63:010	PM PM10	Visual determination of fugitive emissions and opacity

Section V.3: Recordkeeping Requirements

Emission Unit #	Emission Unit Description	Pollutant	Applicable Regulation or Requirement	Parameter Recorded	Description of Recordkeeping
EP01-1	Spray Coating Booth - Spray Gun	PM PM10 VOC	401 KAR 59:010	PM PM10 VOC	Visual determination of fugitive emissions and opacity
EP01-1	Spray Coating Booth - Spray Gun	Ethylbenzene Xylene Cumene Toluene Napthalene	401 KAR 63:020	Ethylbenzene Xylene Cumene Toluene Napthalene	Monthly record or rolling total of materials used
EP01-2	Spray Coating Booth - Aerosol Spray Can	PM PM10 VOC	401 KAR 59:010	PM PM10 VOC	Visual determination of fugitive emissions and opacity
EP01-2	Spray Coating Booth - Aerosol Spray Can	Ethylbenzene Xylene	401 KAR 63:020	Ethylbenzene Xylene	Monthly record or rolling total of materials used
EP02	Spray Gun Cleanout	VOC	401 KAR 59:010	VOC	Visual determination of fugitive emissions and opacity
EP02	Spray Gun Cleanout	Methanol Toluene	401 KAR 63:020	Methanol Toluene	Monthly record or rolling total of materials used
IA01	Parts Washing	Cumene Hydrofluoric Acid	401 KAR 63:020	Cumene Hydrofluoric Acid	Monthly record or rolling total of materials used
IA02	GMA Welding	PM PM10	401 KAR 59:010	PM PM10	Visual determination of fugitive emissions and opacity
IA02	GMA Welding	Chromium Hex Chrom Cobalt Manganese Nickel	401 KAR 63:020	Chromium Hex Chrom Cobalt Manganese Nickel	Monthly record or rolling total of materials used
IA03	Natural Gas Comfort Heater	PM PM10 VOC SO_2 NOx CO CO_2 N_2O Methane	401 KAR 59:010	PM PM10 VOC SO_2 NOx CO CO_2 N_2O Methane	Visual determination of fugitive emissions and opacity
IA03	Natural Gas Comfort Heater	Benzene Toluene Lead	401 KAR 63:020	Benzene Toluene Lead	Monthly record or rolling total of materials used
IA04	Haul Road Paved	PM PM10	401 KAR 63:010	PM PM10	Visual determination of fugitive emissions and opacity
IA05	Haul Road Unpaved	PM PM10	401 KAR 63:010	PM PM10	Visual determination of fugitive emissions and opacity

Section V.4: Reporting Requirements

Emission Unit #	Emission Unit Description	Pollutant	Applicable Regulation or Requirement	Parameter Reported	Description of Reporting
EP01-1	Spray Coating Booth - Spray Gun	PM PM10 VOC	401 KAR 59:010	PM PM10 VOC	Annual Compliance Certifications & Semi-Annual Monitoring Reports
EP01-1	Spray Coating Booth - Spray Gun	Ethylbenzene Xylene Cumene Toluene Napthalene	401 KAR 63:020	Ethylbenzene Xylene Cumene Toluene Napthalene	Annual Compliance Certifications & Semi-Annual Monitoring Reports
EP01-2	Spray Coating Booth - Aerosol Spray Can	PM PM10 VOC	401 KAR 59:010	PM PM10 VOC	Annual Compliance Certifications & Semi-Annual Monitoring Reports
EP01-2	Spray Coating Booth - Aerosol Spray Can	Ethylbenzene Xylene	401 KAR 63:020	Ethylbenzene Xylene	Annual Compliance Certifications & Semi-Annual Monitoring Reports
EP02	Spray Gun Cleanout	VOC	401 KAR 59:010	VOC	Annual Compliance Certifications & Semi-Annual Monitoring Reports
EP02	Spray Gun Cleanout	Methanol Toluene	401 KAR 63:020	Methanol Toluene	Annual Compliance Certifications & Semi-Annual Monitoring Reports
IA01	Parts Washing	Cumene Hydrofluoric Acid	401 KAR 63:020	Cumene Hydrofluoric Acid	Annual Compliance Certifications & Semi-Annual Monitoring Reports
IA02	GMA Welding	PM PM10	401 KAR 59:010	PM PM10	Annual Compliance Certifications & Semi-Annual Monitoring Reports
IA02	GMA Welding	Chromium Hex Chrom Cobalt Manganese Nickel	401 KAR 63:020	Chromium Hex Chrom Cobalt Manganese Nickel	Annual Compliance Certifications & Semi-Annual Monitoring Reports
IA03	Natural Gas Comfort Heater	PM PM10 VOC SO_2 NOx CO CO_2 N_2O Methane	401 KAR 59:010	PM PM10 VOC SO_2 NOx CO CO_2 N_2O Methane	Annual Compliance Certifications & Semi-Annual Monitoring Reports
IA03	Natural Gas Comfort Heater	Benzene Toluene Lead	401 KAR 63:020	Benzene Toluene Lead	Annual Compliance Certifications & Semi-Annual Monitoring Reports
IA04	Haul Road Paved	PM PM10	401 KIAR 63:010	PM PM10	Annual Compliance Certifications & Semi-Annual Monitoring Reports
IA05	Haul Road Unpaved	PM PM10	401 KAR 63:010	PM PM10	Annual Compliance Certifications & Semi-Annual Monitoring Reports

Section V.5: Testing Requirements

Emission Unit #	Emission Unit Description	Pollutant	Applicable Regulation or Requirement	Parameter Tested	Description of Testing
EP01-1	Spray Coating Booth - Spray Gun	PM PM10 VOC	401 KAR 59:010	PM PM10 VOC	As Required by Cabinet
EP01-1	Spray Coating Booth - Spray Gun	Ethylbenzene Xylene Cumene Toluene Napthalene	401 KAR 63:020	Ethylbenzene Xylene Cumene Toluene Napthalene	As Required by Cabinet
EP01-2	Spray Coating Booth - Aerosol Spray Can	PM PM10 VOC	401 KAR 59:010	PM PM10 VOC	As Required by Cabinet
EP01-2	Spray Coating Booth - Aerosol Spray Can	Ethylbenzene Xylene	401 KAR 63:020	Ethylbenzene Xylene	As Required by Cabinet
EP02	Spray Gun Cleanout	VOC	401 KAR 59:010	VOC	As Required by Cabinet
EP02	Spray Gun Cleanout	Methanol Toluene	401 KAR 63:020	Methanol Toluene	As Required by Cabinet
IA01	Parts Washing	Cumene Hydrofluoric Acid	401 KAR 63:020	Cumene Hydrofluoric Acid	As Required by Cabinet
IA02	GMA Welding	PM PM10	401 KAR 59:010	PM PM10	As Required by Cabinet
IA02	GMA Welding	Chromium Hex Chrom Cobalt Manganese Nickel	401 KAR 63:020	Chromium Hex Chrom Cobalt Manganese Nickel	As Required by Cabinet
IA03	Natural Gas Comfort Heater	PM PM10 VOC SO_2 NOx CO CO_2 N_2O Methane	401 KAR 59:010	PM PM10 VOC SO_2 NOx CO CO_2 N_2O Methane	As Required by Cabinet
IA03	Natural Gas Comfort Heater	Benzene Toluene Lead	401 KAR 63:020	Benzene Toluene Lead	As Required by Cabinet
IA04	Haul Road Paved	PM PM10	401 KAR 63:010	PM PM10	As Required by Cabinet
IA05	Haul Road Unpaved	PM PM10	401 KAR 63:010	PM PM10	As Required by Cabinet

Section V.6: Notes, Comments, and Explanations

DEP7007K

Surface Coating or Printing Operations

Division for Air Quality

300 Sower Boulevard

Frankfort, KY 40601

(502) 564-3999

__ Section K.1: Process Information

__ Section K.2: Coating Operations

__ Section K.3: Other Operations

__ Section K.4: Coatings/Printing Materials as Applied

__ Section K.5: HAP-containing Coatings/Printing Materials

__ Section K.6: Notes, Comments, and Explanations

Additional Documentation

___ Complete DEP7007AI, DEP7007N, DEP7007V, and DEP7007GG.

___ Attach SDS or Technical Sheets for all Coating/Printing Materials

___ Attach a flow diagram

Source Name: **D&B Truck Equipment & Supplies LLC**

KY EIS (AFS) #: **21-**

Permit #:

Agency Interest (AI) ID: **163173**

Date: **2/10/2020**

Section K.1: Process Information

Emission Unit #: EP01

Emission Unit Name: Spray Coating Booth

Coating/Printing Line Name: Acrylic Modified Alkyd Enamel Coating (used with spray gun) & Stop Rust Gloss Black Enamel (spray paint can)

Proposed/Actual Date of Construction: *(MM/YYYY)* Existing

List Applicable Regulations: 401 KAR 59:010 & 401 KAR 63:020

Describe Overall Process: When required facillity uses a HVLP Spray gun with a throughput of 2.00 ounces per minute to do touch up work on equipment, or applies touch up paint using spray paint can.

Describe Coatings/Printing Materials: Acrylic Modified Alkyd Enamel Coating/Stop Rust Gloss Black Enamel Coating - SDS are included in application.

Identify the Material that is Coated/Printed: ☑ Metal ☐ Vinyl ☐ Plastics ☐ Wood ☐ Foil ☐ Paper ☐ Other Substrate

Provide detailed description of material coated/printed:

Semi-Truck and construction equipment.

Provide approximate dimensions and range of sizes of parts being coated or printed:

Dump truck bed = Length (16-18 ft), Standard Side Heights (48 inches), Inside Width = (88 inches)

Semi-Truck = Length including trailer (72 feet), Width (8.5 feet excluding the mirrors), Height = (13.5 feet)

Identify the Type of Operation: ☐ Continuous ☑ Batch ☐ Other:

Describe Surface Preparation/Pretreatment Steps:

Washing process followed by welding if needed.

For Coating Operations: ☑ Spray ☐ Flow ☐ Dip tank ☐ Electrodeposition ☐ Brush ☐ Powder ☐ Roller Coat ☐ Other:

HVLP Spary Gun or aerosol spray can

For Printing Operations:
(Select all that apply)

☐ Web ☐ Rotogravure ☐ Heatset ☐ Lithographic ☐ Other:
☐ Sheetfed ☐ Letterpress ☐ Non-heatset ☐ Flexographic

N/A

Describe Final Product:

Reparied trucks, and construction equipment.

Check the category that most closely describes this unit:

☐ Large Appliance Coating
☐ Auto or Light-Duty Truck Coating
☐ Metal Furniture Coating
☐ Metal Coil Coating
☐ Beverage Can Coating
☑ Miscellaneious Metal Parts Coating
☐ Magnet Wire Insulation Coating
☐ Flat Wood Panel Coating
☐ Fabric, Vinyl, or Paper Coating
☐ Boat Manufacturing/ Ship Repair
☐ Pressure Sensitive Tape and Label Coating
☐ Magnet Tape Coating
☐ Publication Rotogravure Printing
☐ Coating of Plastic Parts for Business Machines
☐ Flexible Vinyl and Urethane Coating and Printing
☐ Graphic Arts using Rotogravure and Flexographic Printing
☐ Other: _____

Section K.2: Coating Operations

K.2A: For Spray Coating

Gun/Booth ID	Describe Function	Type	Mode	Maximum Design Application Rate (gal/hr or lb/hr)		Describe how maximum rate was determined
EP01-1	HVLP Spray Gun for Topcoat	☐ Conventional Air Gun ☐ Airless ☑ HVLP ☐ Electrostatic ☐ LVLP ☐ Aerosol Spray Can ☐ Other	☑ Manual ☐ Automatic	0.94	gal/hr	☑ Testing ☐ Equipment Specification Sheet ☐ Estimation
EP01-2	Stop Rust Gloss Black Enamel Coating	☐ Conventional Air Gun ☐ Airless ☐ HVLP ☐ Electrostatic ☐ LVLP ☑ Aerosol Spray Can ☐ Other	☑ Manual ☐ Automatic	0.00385	gal/hr	☐ Testing ☐ Equipment Specification Sheet ☑ Estimation
		☐ Conventional Air Gun ☐ Airless ☐ HVLP ☐ Electrostatic ☐ LVLP ☐ Aerosol Spray Can ☐ Other	☐ Manual ☐ Automatic			☐ Testing ☐ Equipment Specification Sheet ☐ Estimation

If spray guns are used simultaneously, describe:	N/A

K.2B: For Brush Coating

Describe Function:	
Maximum Coating Application Rate: *(gal/hr)*	

K.2C: For Roller Coating

Roller Coat ID	Describe Function	Maximum Coating Application Rate (gal/hr)	Describe how maximum rate was determined
			☐ Testing ☐ Estimation ☐ Equipment Specification Sheet
			☐ Testing ☐ Estimation ☐ Equipment Specification Sheet
			☐ Testing ☐ Estimation ☐ Equipment Specification Sheet

Section K.3: Other Operations

K.3A: For Finishing

Describe Finishing Processes:
Complete Form DEP7007B as applicable

K.3B: For Curing/Drying

Describe Curing/Drying Processes:	Description	Rated Capacity *(MMBtu/hr)*	Fuel	Control Device/Stack ID

K.3C: For Purge

Type: _____

Daily Usage: _____ gal/day

K.3D: For Clean-up

Type: ☑ Manual ☐ Automatic

Daily Usage: 2.74E-02 hrs/day

Operating Hours: 8

K.3E: For Other Equipment

Describe Processes:

Section K.4: Coatings/Printing Materials As Applied

Include SDS or Technical Sheets for all coating/printing materials used.

Trade Name of Material	Description *(Identify as coating, ink, fountain solution, blanket wash, cleaning solvent, thinning solvent, auto wash, manual wash, etc.)*	Emission Unit/Coating ID where material is used	SCC Code	SCC Code Units	Density *(lb/gal)*	Solid Content *(lb/gal)*	VOC Content *(lb/gal)*	Emission Factor for PM* *(lb/SCC)*	Transfer Efficiency *(%)*	Emission Factor for VOC *(lb/SCC)*	Capture Efficiency *(%)*	Control Device/ Stack ID
Acrylic Modified Alkyd Enamel Coating - PPG	Topcoat	EP-01	40200510	gal/hr	9.60	4.19	5.41	1.68 lb/gal	60	5.41 lb/gal	90 (for Particulates)	1
Stop Rust Gloss Black Enamel Coating - Rust-oleum	Topcoat	EP-01	40200510	gal/hr	6.48	2.08	4.40	8.32E-01	60	4.40 lb/gal	90 (for Particulates)	1

**Emission factor for particulate matter (PM) should not include transfer efficiency.*

Section K.5: Hazardous Air Pollutant-containing Coatings/Printing Materials

List each individual hazardous air pollutant (HAP) contained in each material.

Trade Name of Material	HAP Name	HAP CAS #	Identify Solid (*S*) or Volatile (*V*)	HAP % by weight	HAP Emission Factor *(lb/SCC)*	Control Device/ Stack ID
Acrylic Modified Alkyd Enamel Coating - PPG	Ethylbenzene	100-41-4	V	9.90	9.50E-01 lb/gal	Filter/1
	Xylene	1330-20-7	V	50.00	4.81 lb/gal	Filter/1
	Cumene	98-82-8	V	1.00	1.06E-01 lb/gal	Filter/1
	Toluene	108-88-3	V	5.00	4.80E-01 lb/gal	Filter/1
	Napthalene	91-20-3	V	1.00	9.60E-02 lb/gal	Filter/1
Stop Rust Gloss Black Enamel Coating - Spray Can	Ethylbenzene	100-41-4	V	2.50	1.62E-01 lb/gal	Filter/1
	Xylene	1330-20-7	V	10.00	6.48E-01 lb/gal	Filter/1

Section K.6: Notes, Comments, and Explanations
Determined aerosol spray can usage rate by number of 12 ounce cans used in a month - provided by the facility.

Division for Air Quality

300 Sower Boulevard

Frankfort, KY 40601

(502) 564-3999

DEP7007GG

Control Equipment

Additional Documentation

___ Complete Sections GG.1 through GG.12, as applicable

___ Attach manufacturer's specifications for each control device

___ Complete DEP7007AI

Source Name: D&B Truck Equipment Sales, LLC

KY EIS (AFS) #: 21-

Permit #:

Agency Interest (AI) ID: 163173

Date: 2/10/2020

Section GG.1: General Information - Control Equipment

Control Device ID #	Control Device Name	Cost	Manufacturer	Model Name/ Serial #	Date Installed	Inlet Gas Stream Data For All Control Devices					Inlet Gas Stream Data For Condensers, Adsorbers, Afterburners, Incinerators, Oxidizers Only			Equipment Operational Data For All Control Devices		
						Temperature (°F)	Flowrate (scfm @ 68°F)	Average Particle Diameter (μm)	Particle Density (lb/ft³) or Specific Gravity	Gas Density (lb/ft³)	Gas Moisture Content (%)	Gas Composition	Fan Type	Pressure Drop Range (in. H_2O)	Pollutants Collected/ Controlled	Pollutant Removal (%)
1	Filter	Unknown	Hart Cooley 20x20	Unknown	2010	70	3950 cfm	30	Unknown	9.6 lb/gal	N/A	N/A	N/A	Unknown	PM	90

Section GG.11: Other Control Equipment

Control Device ID #	Identify all Emission Units and Control Devices that Feed to Control Equipment	**Type of Control Equipment** (provide description and a diagram with dimensions)
2	IA-02 GMA Welding	Enclosure - welding performed in designated shop with door open - assume 50% control.

Division for Air Quality

300 Sower Boulevard
Frankfort, KY 40601
(502) 564-3999

DEP7007HH

Haul Roads

_____ Section HH.1: Haul Roads

_____ Section HH.2: Yard Area

_____ Section HH.3: Notes, Comments, and Explanations

Additional Documentation

___ Complete DEP7007AI, DEP7007N and DEP7007V

___ SDS for dust suppressant

Source Name: **D&B Truck & Equipment Sales, LLC**

KY EIS (AFS) #: **21-**

Permit #:

Agency Interest (AI) ID: **163173**

Date: **2/10/2020**

Section HH.1: Haul Roads

HH.1A Unpaved Haul Roads:

Average Number of Days in a Year with 0.01 inches of Precipitation (P): 114 Days

Mean Vehicle Weight (W): 10 Tons

Surface Material Silt Content (s): 8.5 %

Haul Road Length: 1.5 Miles

Maximum Vehicle Miles Traveled in a Year: 432 Miles

Describe the dust control method for unpaved haul road(s):
(If dust control suppressants will be utilized, attach the approved Safety Data Sheet(s), as applicable.)

None Known

Emission factor: DAQ Minerals Section

HH.1B Paved Haul Roads:

Average Number of Days in a Year with 0.01 inches of Precipitation (P): 114 Days

Mean Vehicle Weight (W): 10 Tons

Road Surface Silt Loading (sL): 0.015 (G/M^2)

Haul Road Length: 0.6 Miles

Maximum Vehicle Miles Traveled in a Year: 172.80 Miles

Describe the dust control method for paved haul road(s):
(If dust control suppressants will be utilized, attach the approved Safety Data Sheet(s), as applicable.)

None Known (Concrete Road)

Section HH.2: Yard Area (Aggregate Handling And Storage Piles):

Average Number of Days in a Year with 0.01 inches of Precipitation (P): 114 Days

Mean Wind Speed (U): 6.9 MPH

Material Moisture Content (M): N/A %

Describe the dust control method for yard area:
(If dust control suppressants will be utilized, attach the approved Safety Data Sheet(s), as applicable.)

Unknown

Section HH.3: Notes, Comments, and Explanations

Calculation of miles travelled based on 6 trucks a week coming in to the facility.

Division for Air Quality
300 Sower Boulevard
Frankfort, KY 40601
(502) 564-3999

DEP7007DD

Insignificant Activities

___ Section DD.1: Table of Insignificant Activities
___ Section DD.2: Signature Block
___ Section DD.3: Notes, Comments, and Explanations

Source Name: **D&B Truck & Equipment Sales, LLC**

KY EIS (AFS) #: **21-**

Permit #:

Agency Interest (AI) ID: **163173**

Date: **2/10/2020**

Section DD.1: Table of Insignificant Activities

*Identify each activity with a unique Insignificant Activity number (IA #); for example: 1, 2, 3… etc.

Insignificant Activity #	Description of Activity including Rated Capacity	Serial Number or Other Unique Identifier	Applicable Regulation(s)	Calculated Emissions
IA01	Parts Washing	N/A	401 KAR 63:020	Cumene: 1.12E-02 TPY Uncontrolled
				Hydrofluoric Acid: 1.75E-01 TPY Uncontrolled

Insignificant Activity #	Description of Activity including Rated Capacity	Serial Number or Other Unique Identifier	Applicable Regulation(s)	Calculated Emissions
IA02	GMA Welding	N/A	401 KAR 59:010	PM: 5.57E-03 TPY Uncontrolled
				PM10: 5.57E-03 TPY Uncontrolled
IA02	GMA Welding	N/A	401 KAR 63:020	Chromium: 8.35E-06 TPY Uncontrolled
				Manganese: 1.03E-04 TPY Uncontrolled
				Nickel: 8.35E-06 TPY Uncontrolled

Insignificant Activity #	Description of Activity including Rated Capacity	Serial Number or Other Unique Identifier	Applicable Regulation(s)	Calculated Emissions
IA03	Natural Gas Comfort Heating	N/A	401 KAR 59:010	PM: 6.53E-03 TPY Uncontrolled
				PM10: 1.63E-03 Uncontrolled
				VOC: 4.72E-03 TPY Uncontrolled
				SO2: 5.15E-04 TPY Uncontrolled
				Nox: 8.58E-02 TPY Uncontrolled
				CO: 7.22E-02 TPY Uncontrolled
				N2O: 1.89E-03 TPY Uncontrolled
				CO2: 103.06 TPY Uncontrolled
				Methane: 1.97E-03 TPY Uncontrolled
IA03	Natural Gas Comfort Heating	N/A	401 KAR 63:020	Lead: 4.29E-07 TPY Uncontrolled
				Benzene: 1.80E-06 TPY Uncontrolled
				Toluene: 2.92E-06 TPY Uncontrolled

Insignificant Activity #	Description of Activity including Rated Capacity	Serial Number or Other Unique Identifier	Applicable Regulation(s)	Calculated Emissions
IA04	Haul Road Paved	N/A	401 KAR 63:010	PM: 4.68E-04 TPY Uncontrolled
				PM10: 2.72E-04 TPY Uncontrolled
IA05	Haul Road Unpaved	N/A	401 KAR 63:010	PM: 1.17E-02 TPY Uncontrolled
				PM10: 4.21E-03 TPY Uncontrolled

Section DD.2: Signature Block

I, THE UNDERSIGNED, HEREBY CERTIFY UNDER PENALTY OF LAW, THAT I AM A RESPONSIBLE OFFICIAL, AND THAT I HAVE PERSONALLY EXAMINED, AND AM FAMILIAR WITH, THE INFORMATION SUBMITTED IN THIS DOCUMENT AND ALL ITS ATTACHMENTS. BASED ON MY INQUIRY OF THOSE INDIVIDUALS WITH PRIMARY RESPONSIBILITY FOR OBTAINING THE INFORMATION, I CERTIFY THAT THE INFORMATION IS ON KNOWLEDGE AND BELIEF, TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE OR INCOMPLETE INFORMATION, INCLUDING THE POSSIBILITY OF FINE OR IMPRISONMENT.

By:

Dale Clark
Authorized Signature

3-16-20
Date

Dale Clark
Type/Print Name of Siguatory

Owner
Title of Siguatory

Section DD.3: Notes, Comments, and Explanations

Name: D&B Truck & Equipment Sales LLC — **AI # 163173**

Identification	Description	Material	Throughput	Units	Hours	Pollutant	Emission Factors EF	Emission Factors Units	Control	Uncontrolled lb/hr	Uncontrolled TPY	Controlled lb/hr	Controlled TPY
Name	**Spray Coating Booth - Topcoat (Spray Gun)**												
EIS Point	EP01-1	Acrylic Modified Alkyd Enamel Coating - PPG	9.38E-01	gal/hr	8760	PM	1.68	lb/gal	90.00%	1.57	6.89	1.57E-01	6.89E-01
SCC	40200510					PM10	1.68	lb/gal	90.00%	1.57	6.89	1.57E-01	6.89E-01
Reg	401 KAR 59:010; 401 KAR 63:020	Max. Throughput:	2.00	ounces/min		VOC	5.41	lb/gal	0.00%	5.07	22.20	5.07	22.20
Stack #	1		1.56E-02	gal/min		Ethylbenzene	9.50E-01	lb/gal	0.00%	8.91E-01	3.90	8.91E-01	3.90
Height	3.88 ft		9.38E-01	gal/hr		Xylene	4.81	lb/gal	0.00%	4.51	19.75	4.51	19.75
Diameter	2.50		1	gun		Cumene	1.06E-01	lb/gal	0.00%	9.90E-02	4.34E-01	9.90E-02	4.34E-01
Flowrate	3950 cfm					Toluene	4.80E-01	lb/gal	0.00%	4.50E-01	1.97	4.50E-01	1.97
Temp	70° F					Napthalene	9.60E-02	lb/gal	0.00%	9.00E-02	3.94E-01	9.00E-02	3.94E-01
Date	2010												
Control	Filter, 60% TE (PM)												
EF Reference	SDS												
Notes:	Throughput identified through test of coating sprayed in one minute												
Name	**Spray Coating Booth - Topcoat (Aerosol Spray Can)**												
EIS Point	EP01-2	Stop Rust Gloss Black Enamel Coating - Rust-oleum	3.85E-03	gal/hr	8760	PM	8.32E-01	lb/gal	90.00%	3.21E-03	1.40E-02	3.21E-04	1.40E-03
SCC	40200510					PM10	8.32E-01	lb/gal	90.00%	3.21E-03	1.40E-02	3.21E-04	1.40E-03
Reg	401 KAR 59:010; 401 KAR 63:020	Max. Throughput:	360.00	ounces/month		VOC	4.40	lb/gal	0.00%	1.70E-02	7.43E-02	1.70E-02	7.43E-02
Stack #	1		4320.00	ounces/year		Ethylbenzene	1.62E-01	lb/gal	0.00%	6.24E-04	2.73E-03	6.24E-04	2.73E-03
Height	3.88 ft		4.93E-01	ounces/hr		Xylene	6.48E-01	lb/gal	0.00%	2.50E-03	1.09E-02	2.50E-03	1.09E-02
Diameter	2.50		3.85E-03	gal/hr									
Flowrate	3950 cfm												
Temp	70° F												
Date	2010												
Control	Filter, 60% TE (PM)												
EF Reference	SDS												
Notes:	Throughput identified through test of coating sprayed in one minute												
Name	**Spray Gun Cleanout**												
EIS Point	EP02	KOI 15-G5 Virgin Lacquer Thinner	3.42E-03	gal/hr	8760	VOC	6.72	lb/gal	0.00%	2.30E-02	1.01E-01	2.30E-02	1.01E-01
SCC	40200915					Methanol	3.36	lb/gal	0.00%	1.15E-02	5.04E-02	1.15E-02	5.04E-02
Reg	401 KAR 59:010; 401 KAR 63:020	Max Throughput:	2.50	gal/month		Toluene	2.35	lb/gal	0.00%	8.05E-03	3.53E-02	8.05E-03	3.53E-02
Stack #	1		30.00	gal/yr									
Height	3.88 ft		3.42E-03	gal/hr									
Diameter	2.50 ft												
Flowrate	3950 cfm												
Temp	70° F												
Date	2010												
Control	None												
EF Reference	SDS												
Notes:	Throughput identified through test of coating sprayed in one minute												
Name	**Parts Washing - Insignificant Activity**												
EIS Point	IA01	357 Truck Soap/Dynomite/Foam-N-Shine	7.53E-02	gal/hr	8760	Cumene	3.40E-02	lb/gal	0.00%	2.56E-03	1.12E-02	2.56E-03	1.12E-02
SCC	40100296					Hydrofluoric Acid	5.31E-01	lb/gal	0.00%	4.00E-02	1.75E-01	4.00E-02	1.75E-01
Reg	401 KAR 59:010; 401 KAR 63:020	Actual use per washer	165	gal/qtr									
Stack #	N/A		1	washers									
Height	N/A		165.00	gal/qtr total									
Diameter	N/A		660.00	gal/yr									
Flowrate	N/A	Actual Hours	7.53E-02	hr/yr									
Temp	N/A												
Date	2010												
Control	Enclosure												
EF Reference	SDS Worst Case												
Notes:	Amounts based on purchase order for 4th quarter 2019												
Name	**GMA Welding - Insignificant Activity**												
EIS Point	IA02	Electrode Consumed	2.44E-04	tons/hr	8760	PM	5.20	lb/ton	50.00%	1.27E-03	5.57E-03	6.36E-04	2.78E-03
SCC	30905254					PM10	5.20	lb/ton	50.00%	1.27E-03	5.57E-03	6.36E-04	2.78E-03
Reg	401 KAR 59:010; 401 KAR 63:020					Chromium	7.80E-03	lb/ton	50.00%	1.91E-06	8.35E-06	9.53E-07	4.18E-06
Stack #	N/A	Actual Use	88	lb/month		Manganese	9.62E-02	lb/ton	50.00%	2.35E-05	1.03E-04	1.18E-05	5.15E-05
Height	N/A	Actual Hours	180.00	hrs/month		Nickel	7.80E-03	lb/ton	50.00%	1.91E-06	8.35E-06	9.53E-07	4.18E-06
Diameter	N/A	Actual Use	4.89E-01	lb/hr									
Flowrate	N/A	Actual Use	2.44E-04	tons/hr									
Temp	N/A												
Date	2018												
Control	Enclosure - bay doors open assume 50% CE												
EF Reference	PM: AP-42 Chapter 12.19 for PM / SDS for HAPs												
Notes:	44lb roll - use 2 rows per month												
Name	**Natural Gas Comfort Heater - Insignificant Activity**												
EIS Point	IA03	Natural Gas Burned	4.00E-01	MMBtu/hr	4380	PM	7.45E-03	lb/MMBtu	0.00%	2.98E-03	6.53E-03	2.98E-03	6.53E-03
SCC	10500106					PM_{10}	1.86E-03	lb/MMBtu	0.00%	7.44E-04	1.63E-03	7.44E-04	1.63E-03
Reg	401 KAR 59:010; 401 KAR 63:020					VOC	5.39E-03	lb/MMBtu	0.00%	2.16E-03	4.72E-03	2.16E-03	4.72E-03
Stack #	N/A					SO_2	5.88E-04	lb/MMBtu	0.00%	2.35E-04	5.15E-04	2.35E-04	5.15E-04
Height	N/A					NOx	9.80E-02	lb/MMBtu	0.00%	3.92E-02	8.58E-02	3.92E-02	8.58E-02
Diameter	N/A					CO	8.24E-02	lb/MMBtu	0.00%	3.30E-02	7.22E-02	3.30E-02	7.22E-02
Flowrate	N/A					Lead	4.90E-07	lb/MMBtu	0.00%	1.96E-07	4.29E-07	1.96E-07	4.29E-07
Temp	N/A					Benzene	2.06E-06	lb/MMBtu	0.00%	8.24E-07	1.80E-06	8.24E-07	1.80E-06
Date	2010					Toluene	3.33E-06	lb/MMBtu	0.00%	1.33E-06	2.92E-06	1.33E-06	2.92E-06
Control	None Known					Methane	2.25E-03	lb/MMBtu	0.00%	9.00E-04	1.97E-03	9.00E-04	1.97E-03
EF Reference	AP-42 Chapter 1.4					N_2O	2.16E-03	lb/MMBtu	0.00%	8.64E-04	1.89E-03	8.64E-04	1.89E-03
Notes:	Assumed to only be used during winter months (50% of year)					CO_2	117.65	lb/MMBtu	0.00%	47.06	103.06	47.06	103.06
Name	**Haul Road Paved - Insignificant Activity**												
EIS Point	IA04	Fugitive Dust	1.33	tons/hr	8760	PM	3.12E-02	lb/ton	90.00%	1.07E-04	4.68E-04	1.07E-05	4.68E-05
SCC	40288801					PM_{10}	1.81E-02	lb/ton	90.00%	6.21E-05	2.72E-04	6.21E-06	2.72E-05
Reg	401 KAR 63:010												
Stack #	N/A	Trucks per day (Maximum)	1.20	# of trucks									
Height	N/A	Tons per truck load	10.00										
Diameter	N/A	Total Tons per day	12.00	tons/day									
Flowrate	N/A	Hours worked each day	9.00	hrs/day									
Temp	N/A												
Date	2010												
Control	Paved (concrete) assumed 90% for Particulates												
EF Reference	DAQ Minerals Section												
Notes:	Assume 20,000 lbs for each truck + dump trailer												
Name	**Haul Road Unpaved - Insignificant Activity**												
EIS Point	IA05	Fugitive Dust	1.33	tons/hr	8760	PM	7.80E-01	lb/ton	0.00%	2.67E-03	1.17E-02	2.67E-03	1.17E-02
SCC	40288801					PM_{10}	2.81E-01	lb/ton	0.00%	9.62E-04	4.21E-03	9.62E-04	4.21E-03
Reg	401 KAR 63:010												
Stack #	N/A	Trucks per day (Maximum)	1.20	# of trucks									
Height	N/A	Tons per truck load	10.00										
Diameter	N/A	Total Tons per day	12.00	tons/day									
Flowrate	N/A	Hours worked each day	9.00	hrs/day									
Temp	N/A												
Date	2010												
Control	None Known												
EF Reference	DAQ Minerals Section												
Notes:	Assume 20,000 lbs for each truck + dump trailer												

Coating Worst Case Pollutants

	Coating Name	Manufacturer	Density (lb/gal)	VOC lb/gal	VOC%	PM%	PM lb/gal	Ethylebenzene		Xylene		Cumene		Napthalene		Toluene		Hydrofluoric Acid		Methanol	
								%	lb/gal	%	lb/gal	%	lb/gal	%	lb/gal	%	lb/gal	%	lb/gal	%	lb/gal
Detergent	357 (Truck Soap)	Big Red Supply	8.85	0.00	0.00%	0.00%	0.00											6.00%	5.31E-01		
Detergent	Dynomite (Cleaner)	Big Red Supply	8.51	0.00	0.00%	0.00%	0.00					0.40%	3.40E-02								
Detergent	Foam-N-Shine Ready To Use	Big Red Supply	8.51	0.00	0.00%	0.00%	0.00														
Topcoat	Acrylic Modified Alkyd Enamel Coating (Spray Gun)	PPG	9.6	5.41	56.31%	43.69%	4.19	9.90%	9.50E-01	50.10%	4.81	1.10%	1.06E-01	1.00%	9.60E-02	5.00%	4.80E-01				
Topcoat	Stop Rust Gloss Black Enamel Coating (Aerosol Can)	Rust-oleum	6.48	4.40	67.90%	32.10%	2.08	2.50%	1.62E-01	10%	6.48E-01										
Thinner	15-G5 Virgin Lacquer Thinner	KOI	6.72	6.72	100.00%	0.00%	0.00									35.00%	2.35			50.00%	3.36

Facility-wide Emissions

Pollutant	Uncontrolled TPY	Controlled TPY	Requested Limit
PM	6.93	7.11E-01	
PM_{10}	6.91	6.99E-01	
VOC	22.38	22.38	
SO_2	5.15E-04	5.15E-04	
NOx	8.58E-02	8.58E-02	
CO	7.22E-02	7.22E-02	
Lead	4.29E-07	4.29E-07	
Benzene	1.80E-06	1.80E-06	
Toluene	2.01	2.01	
Ethylbenzene	3.91	3.91	
Xylene	19.76	19.76	9
Cumene	4.45E-01	4.45E-01	
Chromium	8.35E-06	4.18E-06	
Manganese	1.03E-04	5.15E-05	
Nickel	8.35E-06	4.18E-06	
Methanol	5.04E-02	5.04E-02	
Napthalene	3.94E-01	3.94E-01	
Hydrofluoric Acid	1.75E-01	1.75E-01	
CO_2	103.06	103.06	
Methane	1.97E-03	1.97E-03	
N_2O	1.89E-03	1.89E-03	
Total HAPs	26.74	26.74	22.5

Haul Road Emission Factors

Emission Factor (lb/ton) = (2 x D x EF)/30

	D	EF Particulates		EF PM_{10}	
Surface	Distance (miles)	Emission Factor (lb/VMT)	Emission Factor (lb/ton)	Emission Factor (lb/VMT)	Emission Factor (lb/ton)
unpaved < 0.25 miles	0.00	3.90	0.00000	1.404	0.00000
unpaved ≥ 0.25 miles	1.50	7.80	0.78000	2.808	0.28080
paved	0.60	0.78	0.03120	0.453	0.01812

VMT = Vehicle Miles Traveled

D & B TRUCK & EQUIPMENT SALES, LLC

General Information

Organization Number	0581115
Name	D & B TRUCK & EQUIPMENT SALES, LLC
Profit or Non-Profit	P - Profit
Company Type	KLC - Kentucky Limited Liability Company
Status	A - Active
Standing	G - Good
State	KY
File Date	3/11/2004
Organization Date	3/11/2004
Last Annual Report	5/14/2019
Principal Office	1401 BURKESVILLE RD GLASGOW, KY 42141
Managed By	Members
Registered Agent	DALE CLARK 1401 BURKESVILLE ROAD GLASGOW, KY 42141

Current Officers

Member	DALE CLARK

Individuals / Entities listed at time of formation

Organizer	DALE CLARK

Images available online

Documents filed with the Office of the Secretary of State on September 15, 2004 or thereafter are available as scanned images or PDF documents. Documents filed prior to September 15, 2004 will become available as the images are created.

Annual Report	5/14/2019	1 page	PDF	
Annual Report	4/19/2018 11:36:41 AM	1 page	PDF	
Annual Report	5/1/2017	1 page	PDF	
Annual Report	7/12/2016	1 page	PDF	
Annual Report	6/4/2015	1 page	PDF	
Annual Report	3/11/2014	1 page	PDF	
Annual Report	4/17/2013	1 page	PDF	
Annual Report	4/13/2012	1 page	PDF	
Registered Agent name/address change	6/2/2011 5:42:17 PM	1 page	PDF	
Annual Report	6/2/2011	1 page	PDF	
Principal Office Address Change	6/8/2010	1 page	tiff	PDF
Annual Report	5/13/2010	1 page	PDF	
Annual Report	6/1/2009	1 page	PDF	
Annual Report	2/12/2008	1 page	PDF	
Annual Report	3/20/2007	1 page	PDF	
Annual Report	3/27/2006	1 page	tiff	PDF
Annual Report	9/8/2005	1 page	tiff	PDF

Assumed Names

Activity History

Filing	File Date	Effective Date	Org. Referenced
Annual report	5/14/2019 4:03:50 PM	5/14/2019 4:03:50 PM	
Annual report	4/19/2018 11:36:42 AM	4/19/2018	
Annual report	5/1/2017 12:25:37 PM	5/1/2017 12:25:37 PM	
Annual report	7/12/2016 2:05:52 PM	7/12/2016 2:05:52 PM	
Annual report	6/4/2015 6:02:06 PM	6/4/2015 6:02:06 PM	
Annual report	3/11/2014 1:03:38 PM	3/11/2014 1:03:38 PM	
Annual report	4/17/2013 12:05:19 PM	4/17/2013 12:05:19 PM	
Annual report	4/13/2012 1:58:23 PM	4/13/2012 1:58:23 PM	
Annual report	6/2/2011 5:45:13 PM	6/2/2011 5:45:13 PM	
Registered agent address change	6/2/2011 5:42:17 PM	6/2/2011 5:42:17 PM	
Principal office change	6/8/2010 1:59:00 PM	6/8/2010	
Annual report	5/13/2010 4:11:37 PM	5/13/2010 4:11:37 PM	
Annual report	6/1/2009 11:52:10 AM	6/1/2009 11:52:10 AM	
Annual report	2/12/2008 12:14:31 PM	2/12/2008 12:14:31 PM	
Annual report	3/20/2007 3:59:18 PM	3/20/2007 3:59:18 PM	
Annual report	3/27/2006 2:03:54 PM	3/27/2006	
Add	3/11/2004 3:27:51 PM	3/11/2004	

Microfilmed Images

Microfilm images are not available online. They can be ordered by faxing a Request For Corporate Documents to the Corporate Records Branch at 502-564-5687.

Articles of Organization	3/11/2004	2 pages

1059 Glover Rd
Google Earth
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N
1000 ft

D&B Truck & Equipment Sales LLC

Google Earth
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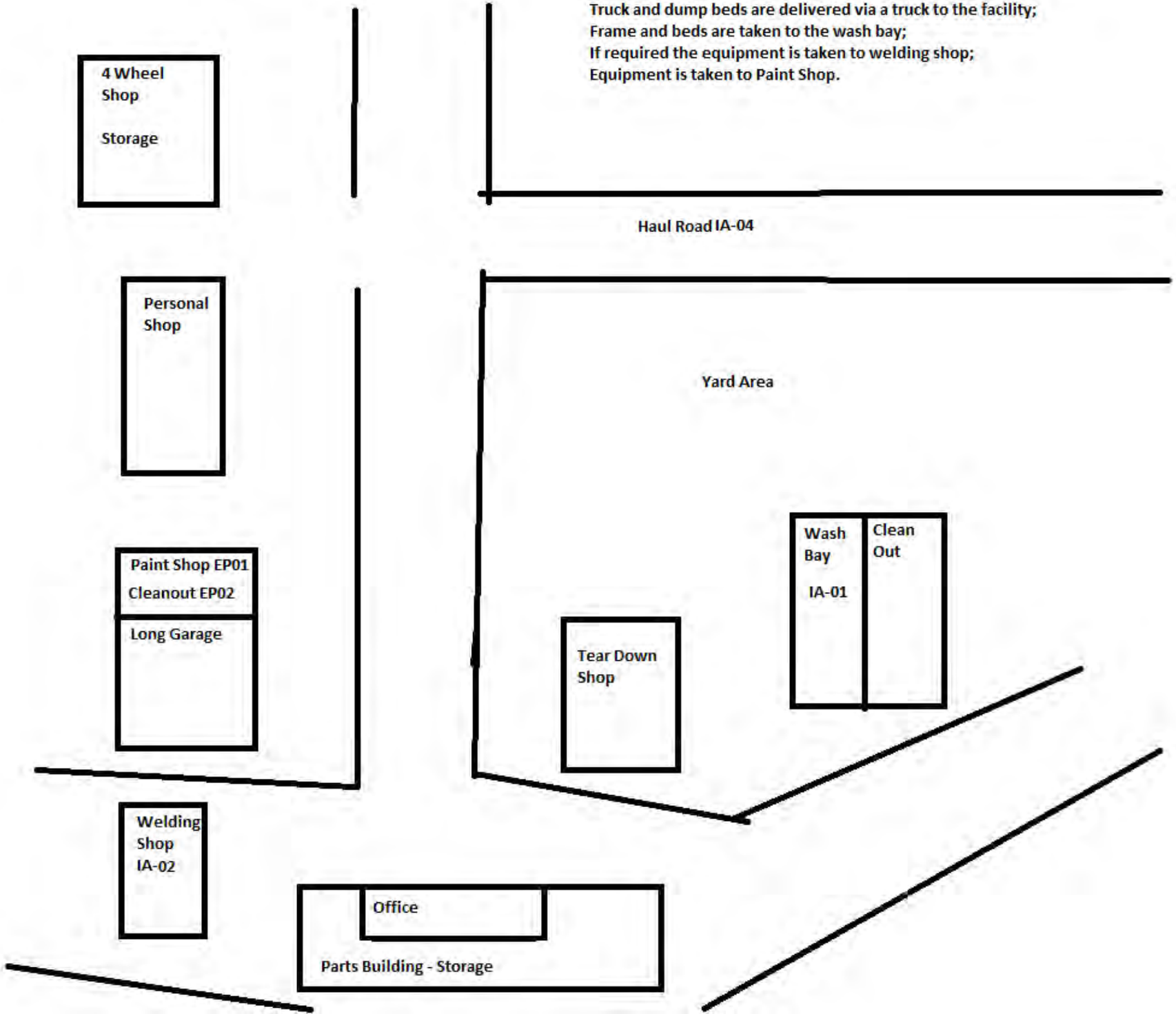
N
300 ft

Legend
1059 Glover Rd
1059 Glover Rd
CREEK
Google Earth
© 2020 Google
N
1000 ft

Truck and dump beds are delivered via a truck to the facility;
Frame and beds are taken to the wash bay;
If required the equipment is taken to welding shop;
Equipment is taken to Paint Shop.



Safety Data Sheet

according to 1907/2006/EC (REACH), 1272/2008/EC (CLP), and OSHA GHS

Printing date: 04 March 2019 Revision: 04 March 2019

SECTION 1: Identification of the substance/mixture and of the company/ undertaking

· **1.1 Product identifier**

· **Trade name:** 357

· **Other means of identification:** No other identifiers

· **1.2 Relevant identified uses of the substance or mixture and uses advised against**

· **Application of the substance / the mixture:** Industrial uses.

· **Uses advised against:** No further relevant information available.

· **1.3 Details of the supplier of the Safety Data Sheet**

· **Manufacturer/Supplier:**

Big Red Supply
135 St. Charles Street
Bowling Green, KY 42101
270-842-7809 or 800-786-0170

· **1.4 Emergency telephone number:**

ChemTel Inc.
(800)255-3924 (North America)
+1 (813)248-0585 (International)

SECTION 2: Hazards identification

· **2.1 Classification of the substance or mixture**

· **Classification according to Regulation (EC) No 1272/2008**

Classifications listed are applicable to the OSHA GHS Hazard Communication Standard (29CFR1910.1200).

Met. Corr.1	H290	May be corrosive to metals.
Acute Tox. 3	H301	Toxic if swallowed.
Acute Tox. 3	H311	Toxic in contact with skin.
Acute Tox. 3	H331	Toxic if inhaled.
Skin Corr. 1B	H314	Causes severe skin burns and eye damage.
Eye Dam. 1	H318	Causes serious eye damage.

· **2.2 Label elements**

· **Labelling according to Regulation (EC) No 1272/2008**

The product is classified and labelled according to the Globally Harmonized System within the United States.
The product is classified and labelled according to the CLP regulation.

· **Hazard pictograms**

GHS05 GHS06

· **Signal word** Danger

· **Hazard-determining components of labelling:**

Sulfuric acid

(Cont'd. on page 2)

(Cont'd. from page 1)

Hydrofluoric acid

· **Hazard statements**

H290	May be corrosive to metals.
H301+H311+H331	Toxic if swallowed, in contact with skin or if inhaled.
H314	Causes severe skin burns and eye damage.

· **Precautionary statements**

P234	Keep only in original container.
P260	Do not breathe mist/vapours/spray.
P264	Wash skin thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves/protective clothing/eye protection.
P301+P310	IF SWALLOWED: Immediately call a POISON CENTER/ doctor.
P301+P330+P331	IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P311	Call a POISON CENTER/doctor.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P321	Specific treatment - after skin ctontact: Rub in Calcium gluconate solution or Calcuim gluconate gel immediately.
P312	Call a POISON CENTRE/doctor if you feel unwell.
P361+P364	Take off immediately all contaminated clothing and wash it before reuse.
P390	Absorb spillage to prevent material damage.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up.
P406	Store in corrosive resistant container with a resistant inner liner.
P501	Dispose of contents/container in accordance with local/regional/national/international regulations.

· **2.3 Other hazards** There are no other hazards not otherwise classified that have been identified.

· **Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

SECTION 3: Composition/information on ingredients

· 3.2 Mixtures

· **Components:**

CAS: 7664-93-9 EINECS: 231-639-5 Index number: 016-020-00-8 Reg.nr.: 01-2119458838-20-XXXX	Sulfuric acid Met. Corr.1, H290; Skin Corr. 1A, H314; Eye Dam. 1, H318	<20%
CAS: 7664-39-3 EINECS: 231-634-8 Index number: 009-002-00-6 Reg.nr.: 01-2119458860-33-XXXX	Hydrofluoric acid Acute Tox. 2, H300; Acute Tox. 2, H310; Acute Tox. 2, H330 Skin Corr. 1A, H314	<6%

(Cont'd. on page 3)

(Cont'd. from page 2)

CAS: 68439-46-3 EC number: 614-482-0 Reg.nr.: 01-2119980051-45-XXXX	Alcohols, C9-11, ethoxylated Eye Irrit. 2, H319	<5%
CAS: 7664-38-2 EINECS: 231-633-2 Index number: 015-011-00-6 Reg.nr.: 01-2119485924-24-XXXX	Phosphoric acid Met. Corr.1, H290; Skin Corr. 1B, H314; Eye Dam. 1, H318	<1%

· **Additional information:**
For the listed ingredient(s), the identity and/or exact percentages are being withheld as a trade secret.
For the wording of the listed Hazard Statements refer to section 16.

SECTION 4: First aid measures

· 4.1 Description of first aid measures

· **After inhalation:**
Supply fresh air; consult doctor in case of complaints.
Provide oxygen treatment if affected person has difficulty breathing.
In case of irregular breathing or respiratory arrest provide artificial respiration.
Do not use mouth to mouth or mouth to nose resuscitation.

· **After skin contact:**
Immediately remove any clothing soiled by the product.
Rub in Ca-gluconate solution or Ca-gluconate gel immediately.
Immediately wash with water and soap and rinse thoroughly.
Seek immediate medical advice.

· **After eye contact:**
Protect unharmed eye.
Remove contact lenses if worn, if possible.
Rinse opened eye for several minutes under running water. Then consult a doctor.

· **After swallowing:**
Rinse out mouth and then drink plenty of water.
Do not induce vomiting; call for medical help immediately.

· 4.2 Most important symptoms and effects, both acute and delayed

Caustic effect on skin and mucous membranes.
Gastric or intestinal disorders when ingested.
Nausea in case of ingestion.
Breathing difficulty

· **Hazards:**
Toxic if swallowed, in contact with skin or if inhaled.
Danger of gastric perforation.
Causes severe skin burns and eye damage.

· 4.3 Indication of any immediate medical attention and special treatment needed

Medical supervision for at least 48 hours.
Monitor circulation.
Use calcium gluconate solution for eye, skin or oral exposure.

SECTION 5: Firefighting measures

(Cont'd. on page 4)

(Cont'd. from page 3)

· **5.1 Extinguishing media**
· **Suitable extinguishing agents:**
The product is not flammable.
Use fire extinguishing methods suitable to surrounding conditions.
· **For safety reasons unsuitable extinguishing agents:** None.
· **5.2 Special hazards arising from the substance or mixture**
Formation of toxic gases is possible during heating or in case of fire.
· **5.3 Advice for firefighters**
· **Protective equipment:**
Wear self-contained respiratory protective device.
Wear fully protective suit.

SECTION 6: Accidental release measures

· **6.1 Personal precautions, protective equipment and emergency procedures**
Wear protective equipment. Keep unprotected persons away.
Ensure adequate ventilation
· **6.2 Environmental precautions** Avoid release to the environment.
· **6.3 Methods and material for containment and cleaning up**
Use limestone to neutralize and/or absorb spill.
Use calcium oxide as a neutralizing agent.
Send for recovery or disposal in suitable receptacles.
· **6.4 Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

SECTION 7: Handling and storage

· **7.1 Precautions for safe handling**
Use only in well ventilated areas.
Avoid splashes or spray in enclosed areas.
Avoid breathing mist/vapours/spray.
Avoid contact with the eyes and skin.
Keep out of reach of children.
Open and handle receptacle with care.

· **7.2 Conditions for safe storage, including any incompatibilities**
· **Requirements to be met by storerooms and receptacles:**
Store in cool, dry conditions in well sealed receptacles.
Use only receptacles specifically permitted for this substance/product.
Unsuitable material for receptacle: aluminium.
Unsuitable material for receptacle: steel.
· **Information about storage in one common storage facility:**
Store away from foodstuffs.
Store away from oxidising agents.
Do not store together with alkalis (caustic solutions).

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· **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

· 8.1 Control parameters

· **Ingredients with limit values that require monitoring at the workplace:**	
7664-93-9 Sulfuric acid	
IOELV (EU)	Long-term value: 0,05 mg/m³
EL (Canada)	Long-term value: 0,2 mg/m³ ACGIH A2; IARC 1
EV (Canada)	Long-term value: 0,2 mg/m³
WEL (Great Britain)	Long-term value: 0,05* mg/m³ *mist: defined as thoracic fraction
OEL (Ireland)	Long-term value: 0,05 mg/m³ IOELV
PEL (USA)	Long-term value: 1 mg/m³
REL (USA)	Long-term value: 1 mg/m³
TLV (USA)	Long-term value: 0,2* mg/m³ *as thoracic fraction
7664-39-3 Hydrofluoric acid	
IOELV (EU)	Short-term value: 2,5 mg/m³, 3 ppm Long-term value: 1,5 mg/m³, 1,8 ppm
EL (Canada)	Ceiling limit: 2 ppm
EV (Canada)	Long-term value: 0,5 ppm Ceiling limit: 2 ppm as F
WEL (Great Britain)	Short-term value: 2,5 mg/m³, 3 ppm Long-term value: 1,5 mg/m³, 1,8 ppm
OEL (Ireland)	Short-term value: 2,5 mg/m³, 3 ppm Long-term value: 1,5 mg/m³, 1,8 ppm Sk, IOELV
PEL (USA)	Long-term value: 3 ppm as F
REL (USA)	Long-term value: 2,5 mg/m³, 3 ppm Ceiling limit: 5* mg/m³, 6* ppm *15-min, as F
TLV (USA)	Long-term value: 0,41 mg/m³, 0,5 ppm Ceiling limit: 1,64 mg/m³, 2 ppm as F; Skin, BEI
7664-38-2 Phosphoric acid	
IOELV (EU)	Short-term value: 2 mg/m³ Long-term value: 1 mg/m³
EL (Canada)	Short-term value: 3 mg/m³

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	Long-term value: 1 mg/m³
EV (Canada)	Short-term value: 3 mg/m³ Long-term value: 1 mg/m³
WEL (Great Britain)	Short-term value: 2 mg/m³ Long-term value: 1 mg/m³
OEL (Ireland)	Short-term value: 2 mg/m³ Long-term value: 1 mg/m³ IOELV
PEL (USA)	Long-term value: 1 mg/m³
REL (USA)	Short-term value: 3 mg/m³ Long-term value: 1 mg/m³
TLV (USA)	Short-term value: 3 mg/m³ Long-term value: 1 mg/m³

· **DNELs:** No further relevant information available.
· **PNECs:** No further relevant information available.

· **Ingredients with biological limit values:**	
7664-39-3 Hydrofluoric acid	
BEI (USA)	3 mg/g creatinine Medium: urine Time: prior to shift Parameter: Fluorides (background, nonspecific) 10 mg/g creatinine Medium: urine Time: end of shift Parameter: Fluorides (background, nonspecific)

· **8.2 Exposure controls**
· **Engineering measures** Provide adequate ventilation.
· **General protective and hygienic measures:**
The usual precautionary measures are to be adhered to when handling chemicals.
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing.
Wash hands before breaks and at the end of work.
Avoid contact with the eyes and skin.
Do not breathe dust/fume/gas/mist/vapours/spray.
· **Respiratory protection:** Suitable respiratory protective device recommended.
· **Protection of hands:**

Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
· **Eye protection:**

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Safety glasses

Follow relevant national guidelines concerning the use of protective eyewear.

· **Body protection:** Acid resistant protective clothing

· **Limitation and supervision of exposure into the environment:**
No further relevant information available.

· **Risk management measures:** No further relevant information available.

SECTION 9: Physical and chemical properties

· 9.1 Information on basic physical and chemical properties

· **Appearance**	
Form:	Liquid
Colour:	Clear Light blue
· **Odour:**	Acidic
· **Odour threshold:**	Not determined.
· **pH-value:**	1,5-2,5
· **Melting point/freezing point:**	Not determined.
· **Initial boiling point and boiling range:**	Not determined.
· **Flash point:**	Not applicable.
· **Flammability (solid, gas):**	Not applicable.
· **Auto/Self-ignition temperature:**	Not determined.
· **Decomposition temperature:**	Not determined.
· **Explosive properties:**	Product does not present an explosion hazard.
· **Explosion limits**	
Lower:	Not determined.
Upper:	Not determined.
· **Oxidising properties**	Non-oxidising.
· **Vapour pressure:**	Not determined.
· **Density:**	
Relative density:	1,06
Vapour density:	Not determined.
Evaporation rate:	<1 Not determined.
· **Solubility in / Miscibility with water:**	Fully miscible.
· **Partition coefficient: n-octanol/water:**	Not determined.
· **Viscosity**	

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Dynamic:	Not determined.
Kinematic:	Not determined.
· **9.2 Other information**	No further relevant information available.

SECTION 10: Stability and reactivity

· **10.1 Reactivity** No further relevant information available.

· **10.2 Chemical stability**

· **Thermal decomposition / conditions to be avoided:**
No decomposition if used and stored according to specifications.

· **10.3 Possibility of hazardous reactions**
Toxic fumes may be released if heated above the decomposition point.
Reacts with alkali (lyes).
Corrosive action on metals.

· **10.4 Conditions to avoid** Excessive heat.

· **10.5 Incompatible materials**
Alkalis
Metals.
Oxidising agents

· **10.6 Hazardous decomposition products**
Under fire conditions only:
Carbon monoxide and carbon dioxide
Phosphorus compounds
Sulphur oxides (SOx)

SECTION 11: Toxicological information

· **11.1 Information on toxicological effects**

· **Acute toxicity:**
Toxic if swallowed, in contact with skin or if inhaled.

· **LD/LC50 values relevant for classification:** None.

· **Primary irritant effect**

· **Skin corrosion/irritation:**
Causes severe skin burns and eye damage.

· **Serious eye damage/irritation:**
Causes serious eye damage.

· **Respiratory or skin sensitisation:** Based on available data, the classification criteria are not met.

· **Carcinogenic categories**

· **IARC (International Agency for Research on Cancer):**
None of the ingredients are listed.

· **Probable routes of exposure:**
Ingestion.
Inhalation.
Eye contact.

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Skin contact.
· **Germ cell mutagenicity:** Based on available data, the classification criteria are not met.
· **Carcinogenicity:** Based on available data, the classification criteria are not met.
· **Reproductive toxicity:** Based on available data, the classification criteria are not met.
· **STOT-single exposure:** Based on available data, the classification criteria are not met.
· **STOT-repeated exposure:** Based on available data, the classification criteria are not met.
· **Aspiration hazard:** Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

· **12.1 Toxicity**
· **Aquatic toxicity:** No further relevant information available.
· **12.2 Persistence and degradability** No further relevant information available.
· **12.3 Bioaccumulative potential** No further relevant information available.
· **12.4 Mobility in soil** No further relevant information available.
· **Additional ecological information:**
· **General notes:**
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
Rinse off of bigger amounts into drains or the aquatic environment may lead to decreased pH-values. A low pH-value harms aquatic organisms. If the dilution of the use-level pH-value is considerably increased after use, the aqueous waste, emptied into drains, is only low water-dangerous.
· **12.5 Results of PBT and vPvB assessment**
· **PBT:** Not applicable.
· **vPvB:** Not applicable.
· **12.6 Other adverse effects** No further relevant information available.

SECTION 13: Disposal considerations

· **13.1 Waste treatment methods**
· **Recommendation**
Dilute concentrate with water and neutralize afterwards with suitable material (lime or chalk). The formed salts are inert and pose little hazard.
The user of this material has the responsibility to dispose of unused material, residues and containers in compliance with all relevant local, state and federal laws and regulations regarding treatment, storage and disposal for hazardous and nonhazardous wastes.

· **Uncleaned packaging:**
· **Recommendation:** Disposal must be made according to official regulations.

SECTION 14: Transport information

· **14.1 UN-Number**
· **DOT, ADR/RID/ADN, IMDG, IATA** UN2922

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· **14.2 UN proper shipping name**	
· **DOT**	Corrosive liquids, toxic, n.o.s. (Hydrofluoric acid, Sulfuric acid)
· **ADR/RID/ADN, IMDG**	CORROSIVE LIQUID, TOXIC, N.O.S. (HYDROFLUORIC ACID, SULPHURIC ACID)
· **IATA**	Corrosive liquid, toxic, n.o.s. (Hydrofluoric acid, Sulphuric acid)
· **14.3 Transport hazard class(es)**	
· **DOT**	
· **Class**	8
· **Label**	8, 6.1
· **ADR/RID/ADN**	
· **Class**	8 (CT1)
· **Label**	8+6.1
· **IMDG**	
· **Class**	8
· **Label**	8/6.1
· **IATA**	
· **Class**	8
· **Label**	8 (6.1)
· **14.4 Packing group**	
· **DOT, ADR/RID/ADN, IMDG, IATA**	II
· **14.5 Environmental hazards:**	
· **Marine pollutant:**	No
· **14.6 Special precautions for user**	Warning: Corrosive substances.
· **Danger code (Kemler):**	86
· **EMS Number:**	F-A,S-B

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· **Segregation groups**	Acids
· **14.7 Transport in bulk according to Annex II of Marpol and the IBC Code**	Not applicable.

· **Transport/Additional information:**

· **DOT**

Limited Quantity for packages less than 30 kg gross and inner packagings less than 1 L each.

· **ADR/RID/ADN**

Limited Quantity for packages less than 30 kg gross and inner packagings less than 1 L each.

· **IMDG**

Limited Quantity for packages less than 30 kg gross and inner packagings less than 1 L each.

· **IATA**

Limited Quantity for packages less than 30 kg gross and inner packagings less than 0,1 L each / 0,5 L net.

SECTION 15: Regulatory information

· **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

· **United States (USA)**

· **SARA**

· **Section 302 (extremely hazardous substances):**	
None of the ingredients are listed.	

· **Section 355 (extremely hazardous substances):**	
7664-93-9	Sulfuric acid
7664-39-3	Hydrofluoric acid

· **Section 313 (Specific toxic chemical listings):**	
7664-93-9	Sulfuric acid
7664-39-3	Hydrofluoric acid

· **TSCA (Toxic Substances Control Act):**
All ingredients are listed.

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· **Proposition 65 (California):**

· **Chemicals known to cause cancer:**
None of the ingredients are listed.

· **Chemicals known to cause developmental toxicity for females:**
None of the ingredients are listed.

· **Chemicals known to cause developmental toxicity for males:**
None of the ingredients are listed.

· **Chemicals known to cause developmental toxicity:**
None of the ingredients are listed.

· **EPA (Environmental Protection Agency)**
None of the ingredients are listed.

· **IARC (International Agency for Research on Cancer)**
None of the ingredients are listed.

· **Canadian Domestic Substances List (DSL) (Substances not listed)**
All ingredients are listed.

· **Directive 2012/18/EU**
· **Named dangerous substances - ANNEX I** None of the ingredients are listed.

· **Other regulations, limitations and prohibitive regulations**

· **Substances of very high concern (SVHC) according to REACH, Article 57**
None of the ingredients are listed.

· **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Relevant phrases**
H290 May be corrosive to metals.
H300 Fatal if swallowed.
H310 Fatal in contact with skin.
H314 Causes severe skin burns and eye damage.
H318 Causes serious eye damage.
H319 Causes serious eye irritation.
H330 Fatal if inhaled.

· **Abbreviations and acronyms:**
ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road
IMDG: International Maritime Code for Dangerous Goods
DOT: US Department of Transportation
IATA: International Air Transport Association
GHS: Globally Harmonised System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
DNEL: Derived No-Effect Level (REACH)

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PNEC: Predicted No-Effect Concentration (REACH)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistant, Bio-accumulable, Toxic
SVHC: Substances of Very High Concern
vPvB: very Persistent and very Bioaccumulative
Met. Corr.1: Corrosive to metals – Category 1
Acute Tox. 2: Acute toxicity – Category 2
Acute Tox. 3: Acute toxicity – Category 3
Skin Corr. 1A: Skin corrosion/irritation – Category 1A
Skin Corr. 1B: Skin corrosion/irritation – Category 1B
Eye Dam. 1: Serious eye damage/eye irritation – Category 1
Eye Irrit. 2: Serious eye damage/eye irritation – Category 2

· **Sources**

Website, European Chemicals Agency (echa.europa.eu)
Website, US EPA Substance Registry Services (ofmpub.epa.gov/sor internet/registry/substreg/home/overview/home.do)
Website, Chemical Abstracts Registry, American Chemical Society (www.cas.org)
Patty's Industrial Hygiene, 6th ed., Rose, Vernon, ed. ISBN: 978-0-470-07488-6
Casarett and Doull's Toxicology: The Basic Science of Poisons, 8th Ed., Klaasen, Curtis D., ed., ISBN: 978-0-07-176923-5.
Safety Data Sheets, Individual Manufacturers

SDS Prepared by:
ChemTel Inc.
1305 North Florida Avenue
Tampa, Florida USA 33602-2902
Toll Free North America 1-888-255-3924 Intl. +01 813-248-0573
Website: www.chemtelinc.com

Safety Data Sheet
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1 Identification of the substance/mixture and of the company/undertaking

· **1.1 Product identifier**

· **Trade name: DYNOMITE**

· **1.2 Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.

· **Application of the substance / the preparation** Cleaning agent/ Cleaner

· **1.3 Details of the supplier of the Safety Data Sheet**
· **Manufacturer/Supplier:**
Big Red Supply
135 St. Charles Street
Bowling Green, KY 42101
270-842-7809 or 800-786-0170

Big Red Supply

· **Further information obtainable from:** Product Safety Department

· **1.4 Emergency telephone number:**
ChemTel Inc.
(800)255-3924, +1 (813)248-0585

2 Hazards identification

· **2.1 Classification of the substance or mixture**
· **Classification according to Regulation (EC) No 1272/2008**

GHS05 corrosion

Skin Corr. 1A H314 Causes severe skin burns and eye damage.

· **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**

C; Corrosive

R35: Causes severe burns.

· **Information concerning particular hazards for human and environment:**
The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

· **Classification system:**
The classification is according to the latest editions of the EU-lists, and extended by company and literature data.
The classification is in accordance with the latest editions of international substances lists, and is supplemented by information from technical literature and by information provided by the company.

· **2.2 Label elements**
· **Labelling according to Regulation (EC) No 1272/2008**
The product is classified and labelled according to the CLP regulation.
· **Hazard pictograms**

GHS05

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· **Signal word** Danger

· **Hazard-determining components of labelling:**
sodium hydroxide

· **Hazard statements**
H314 Causes severe skin burns and eye damage.

· **Precautionary statements**

P101	If medical advice is needed, have product container or label at hand.
P102	Keep out of reach of children.
P103	Read label before use.
P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P264	Wash thoroughly after handling.
P303+P361+P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTER or doctor/physician.
P321	Specific treatment (see on this label).
P304+P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P363	Wash contaminated clothing before reuse.
P301+P330+P331	IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
P405	Store locked up.
P501	Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Hazard description:**

· **WHMIS-symbols:**
D2B - Toxic material causing other toxic effects
E - Corrosive material

· **NFPA ratings (scale 0 - 4)**

Health = 3
Fire = 0
Reactivity = 1

· **HMIS-ratings (scale 0 - 4)**

Health = *3
Fire = 0
Reactivity = 1

· **HMIS Long Term Health Hazard Substances**	
5064-31-3	trisodium nitrilotriacetate

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· **2.3 Other hazards**
· **Results of PBT and vPvB assessment**
· **PBT:** Not applicable.
· **vPvB:** Not applicable.

3 Composition/information on ingredients

· **3.2 Mixtures**
· **Description:** Mixture of substances listed below with nonhazardous additions.

· **Dangerous components:**

CAS: 1310-73-2 EINECS: 215-185-5 Index number: 011-002-00-6	sodium hydroxide C R35 Skin Corr. 1A, H314	2,5-10%
CAS: 5064-31-3 EINECS: 225-768-6 Index number: 607-620-00-6	trisodium nitrilotriacetate Xn R22-40; Xi R36 Carc. Cat. 3 Carc. 2, H351 Acute Tox. 4, H302; Eye Irrit. 2, H319	2,5-10%

· **Additional information:** For the wording of the listed risk phrases refer to section 16.

4 First aid measures

· **4.1 Description of first aid measures**
· **General information:** Immediately remove any clothing soiled by the product.
· **After inhalation:** In case of unconsciousness place patient stably in side position for transportation.
· **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
· **After eye contact:**
Remove contact lenses if worn.
Rinse opened eye for several minutes under running water. Then consult a doctor.
· **After swallowing:**
Rinse out mouth and then drink plenty of water.
Do not induce vomiting; call for medical help immediately.
Drink plenty of water and provide fresh air. Call for a doctor immediately.
· **4.2 Most important symptoms and effects, both acute and delayed**
No further relevant information available.
· **4.3 Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

5 Firefighting measures

· **5.1 Extinguishing media**
· **Suitable extinguishing agents:**
CO_2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
· **5.2 Special hazards arising from the substance or mixture** No further relevant information available.

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· **5.3 Advice for firefighters**
· **Protective equipment:**
Wear self-contained respiratory protective device.
Wear fully protective suit.

6 Accidental release measures

· **6.1 Personal precautions, protective equipment and emergency procedures**
Wear protective equipment. Keep unprotected persons away.
Ensure adequate ventilation
· **6.2 Environmental precautions:**
Dilute with plenty of water.
Do not allow to enter sewers/ surface or ground water.
· **6.3 Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Use neutralizing agent.
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.
· **6.4 Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

7 Handling and storage

· **7.1 Precautions for safe handling**
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.
· **Information about fire - and explosion protection:** No special measures required.

· **7.2 Conditions for safe storage, including any incompatibilities**
· **Storage:**
· **Requirements to be met by storerooms and receptacles:** No special requirements.
· **Information about storage in one common storage facility:** Store away from foodstuffs.
· **Further information about storage conditions:** Keep container tightly sealed.
· **7.3 Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

· **Additional information about design of technical facilities:** No further data; see item 7.

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· **8.1 Control parameters**

· **Ingredients with limit values that require monitoring at the workplace:**	
1310-73-2 sodium hydroxide	
PEL (USA)	2 mg/m³
REL (USA)	Short-term value: C 2 mg/m³
TLV (USA)	Short-term value: C 2 mg/m³
EL (Canada)	Short-term value: C 2 mg/m³

· **Additional information:** The lists valid during the making were used as basis.

· **8.2 Exposure controls**
· **Personal protective equipment:**
· **General protective and hygienic measures:**
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing
Wash hands before breaks and at the end of work.
Avoid contact with the eyes and skin.
· **Respiratory protection:**
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.
· **Protection of hands:**

Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
· **Material of gloves**
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
· **Penetration time of glove material**
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
· **Eye protection:** Contact lenses should not be worn.

9 Physical and chemical properties

· **9.1 Information on basic physical and chemical properties**
· **General Information**
· **Appearance:**
Form: Liquid

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Colour:	Brown
· **Odour:**	Characteristic
· **Odour threshold:**	Not determined.
· **pH-value at 20°C:**	<13
· **Change in condition**	
Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	100°C
· **Flash point:**	Not applicable.
· **Flammability (solid, gaseous):**	Not applicable.
· **Ignition temperature:**	Not determined.
· **Decomposition temperature:**	Not determined.
· **Self-igniting:**	Product is not selfigniting.
· **Danger of explosion:**	Product does not present an explosion hazard.
· **Explosion limits:**	
Lower:	Not determined.
Upper:	Not determined.
· **Vapour pressure:**	Not determined.
· **Density at 20°C:**	1,02 g/cm³
· **Relative density**	Not determined.
· **Vapour density**	Not determined.
· **Evaporation rate**	Not determined.
· **Solubility in / Miscibility with water:**	Fully miscible.
· **Partition coefficient (n-octanol/water):**	Not determined.
· **Viscosity:**	
Dynamic:	Not determined.
Kinematic:	Not determined.
· **Solvent content:**	
Organic solvents:	0,0 %
Solids content:	25,0 %
· **9.2 Other information**	No further relevant information available.

10 Stability and reactivity

· **10.1 Reactivity**

· **10.2 Chemical stability**

· **Thermal decomposition / conditions to be avoided:**

No decomposition if used according to specifications.

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Trade name: DYNOMITE

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· **10.3 Possibility of hazardous reactions** Reacts with strong acids.
· **10.4 Conditions to avoid** No further relevant information available.
· **10.5 Incompatible materials:** No further relevant information available.
· **10.6 Hazardous decomposition products:**
Sulphur oxides (SOx)
Phosphorus oxides (e.g. P2O5)
Nitrogen oxides
Carbon monoxide and carbon dioxide

11 Toxicological information

· **11.1 Information on toxicological effects**
· **Acute toxicity:**

· **LD/LC50 values relevant for classification:**		
1310-73-2 sodium hydroxide		
Oral	LD50	2000 mg/kg (rat)
5064-31-3 trisodium nitrilotriacetate		
Oral	LD50	1450 mg/kg (rat)

· **Primary irritant effect:**
· **on the skin:** Strong caustic effect on skin and mucous membranes.
· **on the eye:** Strong caustic effect.
· **Sensitization:** No sensitizing effects known.
· **Additional toxicological information:**
The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:
Corrosive
Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.

12 Ecological information

· **12.1 Toxicity**
· **Aquatic toxicity:** No further relevant information available.
· **12.2 Persistence and degradability** No further relevant information available.
· **12.3 Bioaccumulative potential** No further relevant information available.
· **12.4 Mobility in soil** No further relevant information available.
· **Additional ecological information:**
· **General notes:**
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
Must not reach sewage water or drainage ditch undiluted or unneutralized.

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Rinse off of bigger amounts into drains or the aquatic environment may lead to increased pH-values. A high pH-value harms aquatic organisms. In the dilution of the use-level the pH-value is considerably reduced, so that after the use of the product the aqueous waste, emptied into drains, is only low water-dangerous.

· **12.5 Results of PBT and vPvB assessment**
· **PBT:** Not applicable.
· **vPvB:** Not applicable.
· **12.6 Other adverse effects** No further relevant information available.

13 Disposal considerations

· **13.1 Waste treatment methods**
· **Recommendation**
Must not be disposed together with household garbage. Do not allow product to reach sewage system.

· **Uncleaned packaging:**
· **Recommendation:** Disposal must be made according to official regulations.
· **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

14 Transport information

· **14.1 UN-Number**	
· **DOT, ADR, IMDG, IATA**	UN3266
· **14.2 UN proper shipping name**	
· **DOT, IMDG, IATA**	CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S. (SODIUM HYDROXIDE)
· **ADR**	3266 CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S. (SODIUM HYDROXIDE)
· **14.3 Transport hazard class(es)**	
· **DOT**	
· **Class**	8 Corrosive substances.
· **Label**	8
· **ADR**	
· **Class**	8 (C5) Corrosive substances.

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· **Label**	8
· **IMDG, IATA**	
· **Class**	8 Corrosive substances.
· **Label**	8
· **14.4 Packing group**	
· **DOT, ADR, IMDG, IATA**	II
· **14.5 Environmental hazards:**	
· **Marine pollutant:**	No
· **14.6 Special precautions for user**	Warning: Corrosive substances.
· **Danger code (Kemler):**	80
· **EMS Number:**	F-A,S-B
· **Segregation groups**	Alkalis
· **14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**	Not applicable.
· **Transport/Additional information:**	
· **ADR**	
· **Tunnel restriction code**	E
· **UN "Model Regulation":**	UN3266, CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S. (SODIUM HYDROXIDE), 8, II

15 Regulatory information

· **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
· **United States (USA)**
· **SARA**

· **Section 355 (extremely hazardous substances):**
None of the ingredients is listed.

· **Section 313 (Specific toxic chemical listings):**
None of the ingredients is listed.

· **TSCA (Toxic Substances Control Act):**
All ingredients are listed.

· **Proposition 65 (California):**

· **Chemicals known to cause cancer:**	
5064-31-3	trisodium nitrilotriacetate

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· **Chemicals known to cause reproductive toxicity for females:**
None of the ingredients is listed.

· **Chemicals known to cause reproductive toxicity for males:**
None of the ingredients is listed.

· **Chemicals known to cause developmental toxicity:**
None of the ingredients is listed.

· **Carcinogenic Categories**

· **EPA (Environmental Protection Agency)**
None of the ingredients is listed.

· **IARC (International Agency for Research on Cancer)**
None of the ingredients is listed.

· **TLV (Threshold Limit Value established by ACGIH)**
None of the ingredients is listed.

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**
None of the ingredients is listed.

· **OSHA-Ca (Occupational Safety & Health Administration)**
None of the ingredients is listed.

· **Canada**

· **Canadian Domestic Substances List (DSL)**
All ingredients are listed.

· **Canadian Ingredient Disclosure list (limit 0.1%)**
None of the ingredients is listed.

· **Canadian Ingredient Disclosure list (limit 1%)**
Ingredients are listed as required.

1310-73-2	sodium hydroxide

· **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Relevant phrases**
H302 Harmful if swallowed.
H314 Causes severe skin burns and eye damage.
H319 Causes serious eye irritation.
H351 Suspected of causing cancer.

R22 Harmful if swallowed.
R35 Causes severe burns.
R36 Irritating to eyes.
R40 Limited evidence of a carcinogenic effect.

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Trade name: DYNOMITE

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· **Abbreviations and acronyms:**
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
DOT: US Department of Transportation
IATA: International Air Transport Association
GHS: Globally Harmonized System of Classification and Labelling of Chemicals
ACGIH: American Conference of Governmental Industrial Hygienists
NFPA: National Fire Protection Association (USA)
HMIS: Hazardous Materials Identification System (USA)
WHMIS: Workplace Hazardous Materials Information System (Canada)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent

Safety Data Sheet
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1 Identification of the substance/mixture and of the company/undertaking

· **1.1 Product identifier**

· **Trade name:** Foam-N- Shine Ready To Use

· **1.2 Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.

· **Application of the substance / the preparation** Alkaline cleaner/ detergent

· **1.3 Details of the supplier of the Safety Data Sheet**
· **Manufacturer/Supplier:**
Big Red Supply
135 St. Charles Street
Bowling Green, KY 42101
270-842-7809 or 800-786-0170

Big Red Supply

· **Further information obtainable from:** Product Safety Department

· **1.4 Emergency telephone number:**
ChemTel Inc.
(800)255-3924, +1 (813)248-0585

2 Hazards identification

· **2.1 Classification of the substance or mixture**
· **Classification according to Regulation (EC) No 1272/2008**

GHS07

Skin Irrit. 2 H315 Causes skin irritation.
Eye Irrit. 2 H319 Causes serious eye irritation.

· **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**

Xi; Irritant

R36/38: Irritating to eyes and skin.
· **Information concerning particular hazards for human and environment:**
The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.
· **Classification system:**
The classification is according to the latest editions of the EU-lists, and extended by company and literature data.
The classification is in accordance with the latest editions of international substances lists, and is supplemented by information from technical literature and by information provided by the company.

· **2.2 Label elements**
· **Labelling according to Regulation (EC) No 1272/2008**
The product is classified and labelled according to the CLP regulation.

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Trade name: Foam-N- Shine Ready To Use

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· **Hazard pictograms**

GHS07

· **Signal word** Warning

· **Hazard statements**

H315 Causes skin irritation.

H319 Causes serious eye irritation.

· **Precautionary statements**

P101	If medical advice is needed, have product container or label at hand.
P102	Keep out of reach of children.
P103	Read label before use.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P264	Wash thoroughly after handling.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P321	Specific treatment (see on this label).
P362	Take off contaminated clothing and wash before reuse.
P332+P313	If skin irritation occurs: Get medical advice/attention.
P337+P313	If eye irritation persists: Get medical advice/attention.
P302+P352	IF ON SKIN: Wash with plenty of soap and water.

· **Hazard description:**

· **WHMIS-symbols:**

D2B - Toxic material causing other toxic effects

· **NFPA ratings (scale 0 - 4)**

Health = 1
Fire = 0
Reactivity = 0

· **HMIS-ratings (scale 0 - 4)**

Health = 1
Fire = 0
Reactivity = 0

· **HMIS Long Term Health Hazard Substances**

None of the ingredients is listed.

· **2.3 Other hazards**

· **Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

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· **vPvB:** Not applicable.

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3 Composition/information on ingredients

· **3.2 Mixtures**
· **Description:** Mixture of substances listed below with nonhazardous additions.

· **Dangerous components:**

CAS: 1310-73-2 EINECS: 215-185-5 Index number: 011-002-00-6	sodium hydroxide C R35 Skin Corr. 1A, H314	≤ 2,5%
CAS: 25155-30-0 EINECS: 246-680-4	sodium dodecylbenzenesulphonate, pure Xn R22 Acute Tox. 4, H302	≤ 2,5%

· **Additional information:** For the wording of the listed risk phrases refer to section 16.

4 First aid measures

· **4.1 Description of first aid measures**
· **After inhalation:** In case of unconsciousness place patient stably in side position for transportation.
· **After skin contact:**
Immediately wash with water and soap and rinse thoroughly.
If skin irritation continues, consult a doctor.
· **After eye contact:**
Remove contact lenses if worn.
Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
· **After swallowing:**
Rinse out mouth and then drink plenty of water.
Do not induce vomiting; call for medical help immediately.
· **4.2 Most important symptoms and effects, both acute and delayed**
No further relevant information available.
· **4.3 Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

5 Firefighting measures

· **5.1 Extinguishing media**
· **Suitable extinguishing agents:**
CO_2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
· **5.2 Special hazards arising from the substance or mixture** No further relevant information available.
· **5.3 Advice for firefighters**
· **Protective equipment:**
Wear self-contained respiratory protective device.
Wear fully protective suit.

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· **Additional information** Cool endangered receptacles with water spray.

6 Accidental release measures

· **6.1 Personal precautions, protective equipment and emergency procedures** Not required.
· **6.2 Environmental precautions:**
Dilute with plenty of water.
Do not allow to enter sewers/ surface or ground water.
· **6.3 Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Ensure adequate ventilation.
· **6.4 Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

7 Handling and storage

· **7.1 Precautions for safe handling**
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.
· **Information about fire - and explosion protection:** No special measures required.

· **7.2 Conditions for safe storage, including any incompatibilities**
· **Storage:**
· **Requirements to be met by storerooms and receptacles:** No special requirements.
· **Information about storage in one common storage facility:** Store away from foodstuffs.
· **Further information about storage conditions:** Keep container tightly sealed.
· **7.3 Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

· **Additional information about design of technical facilities:** No further data; see item 7.

· **8.1 Control parameters**

· **Ingredients with limit values that require monitoring at the workplace:**

1310-73-2 sodium hydroxide	
PEL (USA)	2 mg/m³
REL (USA)	Short-term value: C 2 mg/m³
TLV (USA)	Short-term value: C 2 mg/m³
EL (Canada)	Short-term value: C 2 mg/m³

· **Additional information:** The lists valid during the making were used as basis.

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· **8.2 Exposure controls**
· **Personal protective equipment:**
· **General protective and hygienic measures:**
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing
Wash hands before breaks and at the end of work.
Avoid contact with the eyes and skin.
· **Respiratory protection:**
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.
· **Protection of hands:**

Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
· **Material of gloves**
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
· **Penetration time of glove material**
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
· **Eye protection:** Contact lenses should not be worn.

9 Physical and chemical properties

· **9.1 Information on basic physical and chemical properties**
· **General Information**

· **Appearance:**	
Form:	Liquid
Colour:	Pink
· **Odour:**	Fruit-like
· **Odour threshold:**	Not determined.
· **pH-value:**	Not determined.
· **Change in condition**	
Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	> 100°C
· **Flash point:**	Not applicable.

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· **Flammability (solid, gaseous):**	Not applicable.
· **Ignition temperature:**	Not determined.
· **Decomposition temperature:**	Not determined.
· **Self-igniting:**	Product is not selfigniting.
· **Danger of explosion:**	Product does not present an explosion hazard.
· **Explosion limits:**	
Lower:	Not determined.
Upper:	Not determined.
· **Vapour pressure at 20°C:**	23 hPa
· **Density at 20°C:**	1,02 g/cm³
· **Relative density**	Not determined.
· **Vapour density**	Not determined.
· **Evaporation rate**	Not determined.
· **Solubility in / Miscibility with water:**	Fully miscible.
· **Partition coefficient (n-octanol/water):**	Not determined.
· **Viscosity:**	
Dynamic:	Not determined.
Kinematic:	Not determined.
· **Solvent content:**	
Organic solvents:	0,0 %
Water:	97,5 %
Solids content:	5,0 %
· **9.2 Other information**	No further relevant information available.

10 Stability and reactivity

· **10.1 Reactivity**
· **10.2 Chemical stability**
· **Thermal decomposition / conditions to be avoided:**
No decomposition if used according to specifications.
· **10.3 Possibility of hazardous reactions** Reacts with strong acids.
· **10.4 Conditions to avoid** No further relevant information available.
· **10.5 Incompatible materials:** No further relevant information available.
· **10.6 Hazardous decomposition products:**
Sulphur oxides (SOx)
Phosphorus oxides (e.g. P2O5)
Nitrogen oxides

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Trade name: Foam-N- Shine Ready To Use

Carbon monoxide and carbon dioxide

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11 Toxicological information

· **11.1 Information on toxicological effects**
· **Acute toxicity:**

· **LD/LC50 values relevant for classification:**		
1310-73-2 sodium hydroxide		
Oral	LD50	2000 mg/kg (rat)

· **Primary irritant effect:**
· **on the skin:** Irritant to skin and mucous membranes.
· **on the eye:** Irritating effect.
· **Sensitization:** No sensitizing effects known.
· **Additional toxicological information:**
The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:
Irritant

12 Ecological information

· **12.1 Toxicity**
· **Aquatic toxicity:** No further relevant information available.
· **12.2 Persistence and degradability** No further relevant information available.
· **12.3 Bioaccumulative potential** No further relevant information available.
· **12.4 Mobility in soil** No further relevant information available.
· **Additional ecological information:**
· **General notes:**
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
· **12.5 Results of PBT and vPvB assessment**
· **PBT:** Not applicable.
· **vPvB:** Not applicable.
· **12.6 Other adverse effects** No further relevant information available.

13 Disposal considerations

· **13.1 Waste treatment methods**
· **Recommendation**
Must not be disposed together with household garbage. Do not allow product to reach sewage system.
· **Uncleaned packaging:**
· **Recommendation:** Disposal must be made according to official regulations.

(Contd. on page 8)

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Trade name: Foam-N- Shine Ready To Use

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· **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

14 Transport information

· **14.1 UN-Number**	
· **DOT, ADR**	NA
· **14.2 UN proper shipping name**	NA
· **DOT**	NA
· **14.3 Transport hazard class(es)**	NA
· **DOT**	NA
· **Class**	NA
· **IATA**	NA
· **14.4 Packing group**	NA
· **DOT**	NA
· **14.5 Environmental hazards:**	
· **Marine pollutant:**	No
· **14.6 Special precautions for user**	Not applicable.
· **Segregation groups**	Alkalis
· **14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**	Not applicable.

15 Regulatory information

· **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
· **United States (USA)**
· **SARA**

· **Section 355 (extremely hazardous substances):**

None of the ingredients is listed.

· **Section 313 (Specific toxic chemical listings):**

None of the ingredients is listed.

· **TSCA (Toxic Substances Control Act):**

All ingredients are listed.

· **Proposition 65 (California):**

· **Chemicals known to cause cancer:**

None of the ingredients is listed.

· **Chemicals known to cause reproductive toxicity for females:**

None of the ingredients is listed.

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Safety Data Sheet
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Trade name: Foam-N- Shine Ready To Use

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· **Chemicals known to cause reproductive toxicity for males:**
None of the ingredients is listed.

· **Chemicals known to cause developmental toxicity:**
None of the ingredients is listed.

· **Carcinogenic Categories**

· **EPA (Environmental Protection Agency)**
None of the ingredients is listed.

· **IARC (International Agency for Research on Cancer)**
None of the ingredients is listed.

· **TLV (Threshold Limit Value established by ACGIH)**
None of the ingredients is listed.

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**
None of the ingredients is listed.

· **OSHA-Ca (Occupational Safety & Health Administration)**
None of the ingredients is listed.

· **Canada**

· **Canadian Domestic Substances List (DSL)**
All ingredients are listed.

· **Canadian Ingredient Disclosure list (limit 0.1%)**
None of the ingredients is listed.

· **Canadian Ingredient Disclosure list (limit 1%)**
Ingredients are listed as required.

1310-73-2	sodium hydroxide
25155-30-0	sodium dodecylbenzenesulphonate, pure

· **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Relevant phrases**
H302 Harmful if swallowed.
H314 Causes severe skin burns and eye damage.

R22 Harmful if swallowed.
R35 Causes severe burns.

· **Abbreviations and acronyms:**
GHS: Globally Harmonized System of Classification and Labelling of Chemicals
ACGIH: American Conference of Governmental Industrial Hygienists
NFPA: National Fire Protection Association (USA)
HMIS: Hazardous Materials Identification System (USA)
WHMIS: Workplace Hazardous Materials Information System (Canada)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent

BIG RED SUPPLY INC

135 SAINT CHARLES ST
BOWLING GREEN, KY 42101
270-842-7809

Statement

Date
2/3/2020

Bill To

D & B TRUCK & EQUIPMENT
1401 BURKSVILLE HWY
GLASGOW, KY 42141

Phone #	Terms	Due Date	Amount Due
270-842-7809	Net 30	3/4/2020	$6,062.50

Date	Description	Amount	Balance
10/31/2019	Balance forward		3,278.19
11/07/2019	INV #5575. Diamite 55 gal.	512.25	3,790.44
	--- TS-06D, 55 @ $8.95 = 492.25		
	--- freight, 1 @ $20.00 = 20.00		
	--- Tax: KY TAX # @ 0.0% = 0.00		
11/18/2019	INV #5445.	241.80	4,032.24
	--- SS-98, 1 @ $85.00 = 85.00		
	--- SS-97, 1 @ $20.00 = 20.00		
	--- QC-04, 1 @ $12.95 = 12.95		
	--- QC-23, 1 @ $12.95 = 12.95		
	--- QC-43, 1 @ $12.95 = 12.95		
	--- QC-64, 1 @ $12.95 = 12.95		
	--- SS-99, 1 @ $85.00 = 85.00		
	--- FOUND WASHER HAD THERMOSTAT TURNED OFF, CHECK WASHER AND TESTED		
	--- Tax: KY TAX # @ 0.0% = 0.00		
11/21/2019	PMT #11275.	-3,790.44	241.80
11/27/2019	INV #5588.	1,011.90	1,253.70
	--- CP-357, 110 @ $8.95 = 984.50 110 gal 2 drup.		
	--- PN-25, 4 @ $1.85 = 7.40		
	--- SP-06 $0.00		
	--- freight, 1 @ $20.00 = 20.00		
	--- Tax: KY TAX # @ 0.0% = 0.00		
01/02/2020	PMT #11551.	-1,253.70	0.00

Current	1-30 Days Past Due	31-60 Days Past Due	61-90 Days Past Due	Over 90 Days Past Due	Amount Due
6,062.50	0.00	0.00	0.00	0.00	$6,062.50

To receive emailed invoices and statements please email your name and the name of the company to andrewbigredsupply@yahoo.com

Starting 1/1/2019 all invoices that are over 90 days old will be charged a 2% of interest per month after the payment due date.

All credit card payments will be charged an additional 3% fee.

Web Site
www.bigredsupply.com

BIG RED SUPPLY INC

135 SAINT CHARLES ST
BOWLING GREEN, KY 42101
270-842-7809

Statement

Date
2/3/2020

Bill To

D & B TRUCK & EQUIPMENT
1401 BURKSVILLE HWY
GLASGOW, KY 42141

Phone #	Terms	Due Date	Amount Due
270-842-7809	Net 30	3/4/2020	$6,062.50

Date	Description	Amount	Balance
01/16/2020	INV #5564. --- TS-06T, 275 @ $7.95 = 2,186.25 Diamante --- CS-56T, 275 @ $6 = 1,650.00 Foam Shine --- SP-06 $0.00 --- freight, 1 @ $20.00 = 20.00 --- Tax: KY TAX # @ 0.0% = 0.00	3,856.25	3,856.25
01/30/2020	INV #5776. --- TS-06T, 275 @ $7.95 = 2,186.25 --- freight, 1 @ $20.00 = 20.00 --- FOR TX LOCATION --- Tax: KY TAX # @ 0.0% = 0.00	2,206.25	6,062.50

Current	1-30 Days Past Due	31-60 Days Past Due	61-90 Days Past Due	Over 90 Days Past Due	Amount Due
6,062.50	0.00	0.00	0.00	0.00	$6,062.50

To receive emailed invoices and statements please email your name and the name of the company to andrewbigredsupply@yahoo.com

Starting 1/1/2019 all invoices that are over 90 days old will be charged a 2% of interest per month after the payment due date.

All credit card payments will be charged an additional 3% fee.

Web Site
www.bigredsupply.com

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Hover cursor over image to view larger picture

WARNING

Miller® Millermatic® 252 MIG Welder, 200 V 200 Amps At 28 Volt At 60% Duty Cycle Single Phase 207 lb

Airgas Part #: MIL907321
Miller Electric Manufacturing
Manufacturer #: 907321
Log in to get your price

$2,809.00 / Each

Qty 1

Package Size: 1 Each
$2,809.00 Each

$2,809.00 Each

Typically in Stock

ADD TO CART

Item Details

Millermatic® 252 MIG Welder measuring 30" X 19" X 40" includes 200/208/230 input voltage spool gun or push/pull gun. It has new patent pending EZ-Change and trade which helps to easily roll cylinders on and off of rack. System features no tool quick-change reversible drive rolls and an easy-to-set scaled tension knob. EZ-Access and trade consumable compartment and parameter chart which helps to set weld parameters right the first time with easy new flip down compartment that provides fast access to parameter chart and consumables stored inside the welder. It welds longer on high end applications and has highest output in its class. Welder features Active Arc Stabilizer and trade patented Miller® design which is excellent and superior to the competition and reduces the cleaning process. Cooling system operates only when it's necessary to reduce power consumption and contaminants drawn into the machine. It keeps power constant even if input voltage varies by +/- 10% with line voltage compensation. It is used in aluminum welding fabrication maintenance and repair structural steel work pipe welding sheet metal farm and ranch maintenance and repair manufacturing metal art/sculpture motor sports and schools.

Features

- Highest output in its class (250 A at 28 VDC) weld longer on high end applications
- Large, digital front panel with built in digital timers menu enables operator to preset voltage and wire feed speed, standard run in, pre/postflow, burn back, spot/delay (stitch) timer menu
- Auto Gun Detect™ allows operator to simply pull trigger on MIG gun, spool gun, or push pull gun automatically detects and recalls the voltage, wire feed speed and timer of the active gun
- Push pull gun direct connect now directly connects your push pull gun, no extra module required
- Angled, dual gear driven, cast aluminum drive system features no tool, quick change reversible drive rolls and an easy to set, scaled tension knob
- EZ-Change™ low cylinder rack allows operators to easily roll cylinders on and off of rack no need to lift cylinders

- EZ-Access™ consumable compartment and parameter chart set weld parameters right the first time with convenient new flip down compartment that provides fast access to parameter chart and consumables
- Larger work area now with longer 15 ft M-25 gun
- Less weld cleanup with Active Arc Stabilizer™ patented design provides excellent starts proven superior to the competition
- Fan-On-Demand™ cooling system operates only when needed reducing Power consumption and contaminants drawn into the machine, Line voltage compensation keeps Power constant even if input voltages varies by +/- 10%

Specifications

- Input Power: 200/208/230 V
- Rated Output: 25 VDC
- Single Phase
- 60 Hz

Includes

- M-25 MIG Gun With 15' Leads
- Smith argon mix regulator/flow gauge and gas hose
- 10' Power Cord with plug
- Extra contact tips, setup/operation CD
- Factory-Installed Running Gear/Cylinder Rack

Applications

- Metal fabrication
- Maintenance and repair
- Farm/Hobby
- Light industrial applications

Product Attributes

Trade Name
» Millermatic® 252

Feeder Information
» Built In

Process
» Flux Cored (FCAW)

Phase
» Single Phase

Input AC Voltage
» 200 V

Output DC Amps (Max)
» 300

Duty Cycle
» 200 Amps At 28 Volt At 60% Duty Cycle

Weight
» 207 lb

» Show less

Airgas
an Air Liquide company

Gas Supply

- Cylinders
- Liquid Cylinders
- MicroBulk
- Bulk
- On-Site Generation - FLOXAL
- Dynamic On-site Mixer
- Jobsite Skid

Solutions

- Airgas OUTLOOK®
- Airgas SupplySync
- Welding Efficiency
- Red-D-Arc
- Welding Automation
- Airgas Dry Ice

Industries

- Construction
- Metal Fabrication
- Life Sciences Healthcare
- Food & Beverage

Millermatic
252
Miller
Miller

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SARA Section 313 – Emission Reporting 1%

Molybdenum (7439-98-7)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

Listed on United States SARA Section 313

Carbon (7440-44-0)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

Iron (7439-89-6)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

SARA Section 313 – Emission Reporting 1%

US State Regulations

U.S. – California – Proposition 65 – Carcinogens list

WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

Nickel (7440-02-0)

U.S. – California – Proposition 65 – Carcinogens list

WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

Nickel (7440-02-0)

U.S. - Massachusetts - Right To Know List

U.S. - New Jersey - Right to Know Hazardous Substance List

U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List

U.S. - Pennsylvania - RTK (Right to Know) - Special Hazardous Substances

U.S. - Pennsylvania - RTK (Right to Know) List

Manganese (7439-96-5)

U.S. - Massachusetts - Right To Know List

U.S. - New Jersey - Right to Know Hazardous Substance List

U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List

U.S. - Pennsylvania - RTK (Right to Know) List

Silicon (7440-21-3)

U.S. - Massachusetts - Right To Know List

U.S. - New Jersey - Right to Know Hazardous Substance List

U.S. - Pennsylvania - RTK (Right to Know) List

Chromium (7440-47-3)

U.S. - Massachusetts - Right To Know List

U.S. - New Jersey - Right to Know Hazardous Substance List

U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List

U.S. - Pennsylvania - RTK (Right to Know) - Special Hazardous Substances

U.S. - Pennsylvania - RTK (Right to Know) List

Copper (7440-50-8)

U.S. - Massachusetts - Right To Know List

U.S. - New Jersey - Right to Know Hazardous Substance List

U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List

U.S. - Pennsylvania - RTK (Right to Know) List

Molybdenum (7439-98-7)

U.S. - Massachusetts - Right To Know List

U.S. - New Jersey - Right to Know Hazardous Substance List

U.S. - Pennsylvania - RTK (Right to Know) List

Canadian Regulations

Carbon Steel Welding Wire

WHMIS Classification Uncontrolled product according to WHMIS Classification criteria

Nickel (7440-02-0)

Listed on the Canadian DSL (Domestic Substances List)

Listed on the Canadian IDL (Ingredient Disclosure List)

IDL Concentration 0.1 %

WHMIS Classification Class D Division 2 Subdivision B - Toxic material causing other toxic effects
Class D Division 2 Subdivision A - Very toxic material causing other toxic

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12.6 Other adverse effects
No data available

Section 13 – Disposal Considerations

13.1 Waste treatment methods	Comply with Federal, State, and local regulations.
13.2 Material Disposal	Recover or recycle if possible. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste classification and disposal methods in compliance with applicable regulations. Do not dispose into the environment, in drains or in water courses.
13.3 Container Disposal	Dispose in accordance with prevailing regulations, preferably to a recognised collector or contractor. The competence of the collector or contractor should be established beforehand.
13.4 Local Legislation	Disposal should be in accordance with applicable regional, national, and local laws and regulations.

Section 14 – Transport Information

	UN	DOT	IMDG	IATA
UN number	Not regulated	Not regulated	Not regulated	Not regulated
UN proper shipping name	-	-	-	-
Transport hazard class(es)	-	-	-	-
Packing group	-	-	-	-
Environmental hazards	No	No	No	No
Special precautions for user	Not available	Not available	Not available	Not available
Additional information	-	-	-	-

Section 15 – Regulatory Information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

US Federal Regulations

Nickel (7440-02-0)
Listed on the United States TSCA (Toxic Substances Control Act) Inventory
Listed on United States SARA Section 313

RQ(Reportable Quantity, Section 304 of EPA's List of Lists)	100 lb (only aplicable if particles are <100 μm)
SARA Section 311/312 Hazard classes	Immediate (acute) health hazard Delayed (chronic) health hazard
SARA Section 313 – Emission Reporting	0.1%

Manganese (7439-96-5)
Listed on the United States TSCA (Toxic Substances Control Act) Inventory
Listed on United States SARA Section 313

SARA Section 313 – Emission Reporting	1%

Silicon (7440-21-3)
Listed on the United States TSCA (Toxic Substances Control Act) Inventory

Chromium (7440-47-3)
Listed on the United States TSCA (Toxic Substances Control Act) Inventory
Listed on United States SARA Section 313

SARA Section 313 – Emission Reporting	1%

Copper (7440-50-8)
Listed on the United States TSCA (Toxic Substances Control Act) Inventory
Listed on United States SARA Section 313

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USA ACGIH	ACGIH TWA (mg/m³)	10 mg/m³ (inhalable fraction) 3 mg/m³ (respirable fraction)
USA OSHA	OSHA PEL (TWA) (mg/m³)	5 mg/m³(soluble compounds) 15 mg/m³(insoluble compounds)

8.2 Exposure controls

Appropriate engineering controls:

Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure to metal dust or fumes from use. Ensure adequate ventilation, especially in confined areas to control exposure to welding dust and fumes. Avoid dust production. Avoid creating or spreading dust. Ensure that dust-handling systems (such as exhaust ducts, dust collectors, vessels, and processing equipment) are designed in a manner to prevent the escape of dust into the work area (i.e., there is no leakage from the equipment).

Personal protective equipment

Safety glasses. Gloves. Protective clothing. Wear respiratory protection. When welding: Welding helmet or googles, welding gloves, and respiratory protection.

Material for protective clothing	Wear suitable protective clothing. With molten material wear thermally protective clothing.
Respiratory protection	Use ventilation to prevent exposure to welding fumes and dust. If exposure limits are exceeded or irritation is experienced, approved respiratory protection should be worn.
Hand protection	Protective Gloves. If material is hot, wear thermally resistant protective gloves.
Eye / Face protection	Safety glasses. Welders should wear goggles or safety glasses with side shields that comply with ANSI Z87.1 under welding helmets and always wear goggles or other suitable eye protection when welding.
Skin and body protection:	Wear suitable protective clothing to prevent contact with dust, sparks, and hot materials from welding.

Section 9 – Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

Physical appearance(20°C)	Solid wire, metallic
Odor	Pleasant
Odor threshold	No data available
pH	No data available
Boiling point/range	No data available
Melting point/range	No data available
Flash Point	No data available
Explosion Limits	
Lower	No data available
Upper	No data available
Autoignition Temperature	No data available
Vapour Pressure	No data available
Vapour Density	No data available
Density	No data available
Solubility	Insoluble in water.

9.2 Other information

Other physical-chemical data were not identified

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Section 10 – Stability and Reactivity

10.1 Reactivity
No specific reactivity hazards associated with this product.

10.2 Chemical Stability
This product is stable.

10.3 Possibility of hazardous reactions
Stable under recommended storage conditions.

10.4 Conditions to avoid
Incompatible materials

10.5 Incompatible materials
Strong acids, Strong bases, Strong oxidizers, Corrosive substances in prolonged contact with metals may produce flammable hydrogen gas, Water (when product is in dust/molten form).

10.6 Hazardous decomposition products
Under conditions of fire this material may produce: Oxides of iron, Oxides of manganese, Oxides of nickel, Oxides of copper, Chromium oxides, Molybdenum oxides.

Section 11 – Toxicological Information

11.1 Information on toxicological effects

Acute toxicity	Not classified
LD50 and LC50 Data	Not available
Skin Irritation / Corrosion	Not classified
Serious eye damage/irritation	Not classified
Respiratory or skin Sensitization	Not classified
Germ cell mutagenicity	Not classified
Teratogenicity	Not classified
Carcinogenicity	Not classified
Specific target organ toxicity (single exposure)	Not classified
Specific target organ toxicity (repeated exposure)	Not classified
Reproductive toxicity	Not classified
Aspiration hazard	Not classified

Potential acute health effects

Eye contact	No known significant effects or critical hazards
Inhalation	No known significant effects or critical hazards
Skin contact	No known significant effects or critical hazards
Ingestion	No known significant effects or critical hazards

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact	Prolonged contact with large amounts of dust may cause mechanical irritation
Inhalation	Not expected to present a significant inhalation hazard under anticipated conditions of normal use.
Skin contact	Prolonged contact with large amounts of dust may cause mechanical irritation.
Ingestion	Ingestion is not considered a potential route of exposure

Information on Toxicological effects – Ingredient(s)

LD50 and LC50 Data

Nickel (7440-02-0)

LD50 Oral Rat	>9000 mg/kg

Manganese (7439-96-5)

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This product as shipped in its massive form, is inert and not hazardous to human health. Under normal conditions of use during welding, this product and its fumes pose separate hazards. Exposure may aggravate those with pre-existing eye, skin, or respiratory conditions. Inhalation of dusts and fumes can cause metal fume fever. Symptoms can include a metallic or sweet taste in the mouth, sweating, shivering, headache, throat irritation, fever, chills, thirstiness, muscle aches, nausea, vomiting, weakness, fatigue, and shortness of breath. Overexposure to manganese fumes may affect the brain and central nervous system, resulting in poor coordination, difficulty speaking, and arm or leg tremor. This condition can be irreversible. Electric shock from welding equipment or electrodes may be fatal. Hot metal spatter and heat from electric arcs and welding flames may cause burns to the hands and body or may cause fire if it comes into contact with combustible materials. UV, IR and light radiation from an electric arc or welding flame process may cause damage to unprotected eyes. Fumes and gases generated during the welding process can be harmful to your health. If dust is generated, the dust may be a flammable solid, combustible dust, and self-heating. Use engineering controls and housekeeping to prevent exposure to and accumulation of dust in the workplace. Much of the information provided in this SDS is for situations of use in which hazardous exposures may occur, such as in welding applications or for metals in powdered form.

2.4 Unknown acute toxicity (GHS-US)

No data available

Section 3 – Composition/Information on Ingredient

Substance / Mixture Mixture

Ingredient name	CAS No.	Weight %	Classification (GHS-US)
Iron	7439-89-6	95.9~97.74	Not classified
Carbon	7440-44-0	0.06~0.15	Not classified
Manganese	7439-96-5	1.4~1.85	Not classified
Silicon	7440-21-3	0.8~1.15	Not classified
Copper	7440-50-8	≤0.5	Not classified
Nickel	7440-02-0	≤0.15	Not classified
Chromium	7440-47-3	≤0.15	Not classified
Molybdenum	7439-98-7	≤0.15	Not classified

Section 4 – First Aid Measures

4.1 Description of first aid measures

Inhalation Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

Skin contact Flush with water for at least 15 minutes. Seek medical attention if irritation develops or persists.

Eye contact Immediately flush eyes with water and continue washing for at least 15 minutes. Obtain medical attention if discomfort persists.

Ingestion Do NOT induce vomiting. Get immediate medical attention.

4.2 Most important symptoms and effects, both acute and delayed

Inhalation Short-term (acute) overexposure to the gases, fumes, and dusts may include irritation of the eyes, lungs, nose, and throat. Some toxic gases associated with welding may cause pulmonary edema, asphyxiation, and death. Acute overexposure may include signs and symptoms such as watery eyes, nose and throat irritation, headache, dizziness, difficulty in breathing, frequent coughing, or chest pain. The presence of chromium/chromate in fume can cause irritation of nasal membranes and skin. Excessive inhalation or ingestion of manganese can produce manganese poisoning. Overexposure to manganese compounds may affect the central nervous system, symptoms of which are languor, sleepiness, muscular weakness,

	emotional disturbances, and spastic gait resembling Parkinsonism. These symptoms can become progressive and permanent if not treated. Excessive inhalation of fumes may cause "Metal Fume Fever" with Flu-like symptoms such as chills, fever, body aches, vomiting, sweating, etc.
Skin contact	Dusts may cause irritation.
Eye contact	Causes eye irritation.
Ingestion	Not an anticipated route of exposure during normal product handling. May be harmful if ingested.
Over-exposure signs/ symptoms	Not available.

4.3 Indication of the immediate medical attention and special treatment needed

No additional information available.

Section 5 – Fire Fighting Measures

5.1 Extinguishing media

Suitable extinguishing media

Use extinguishing media appropriate for surrounding fire. Class D Extinguishing Agent (for metal powder fires). Dry chemical powder; alcohol-resistant foam, carbon dioxide (CO2), dry sand.

Unsuitable extinguishing media

Do not use water when molten material or dust is involved, may spread fire.

5.2 Special hazards arising from the substance or mixture

Hazards from the substance or mixture	Not flammable. Dust generated from processing may present a dust explosion hazard.
Explosion hazard	Product is not explosive.

5.3 Advice for fire-fighters

Precautionary measures fire	Exercise caution when fighting any chemical fire. Under fire conditions, hazardous fumes will be present.
Firefighting instructions:	Do not breathe fumes from fires or vapors from decomposition. Use water stream to cool containers. Keep upwind.
Protection During Firefighting	Firefighters must use full bunker gear including NIOSH-approved positive-pressure self-contained breathing apparatus to protect against potential hazardous combustion and decomposition products.
Hazardous Combustion Products	Oxides of iron. Oxides of manganese. Oxides of nickel. Oxides of copper. Chromium oxides.

Section 6 – Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures:

Do not handle until all safety precautions have been read and understood.

Use personal protective equipment. Keep people away from and upwind of spill/leak.

Ensure adequate ventilation. Avoid creating or spreading dust. Eliminate ignition sources. Evacuate unnecessary personnel.

6.2 Environmental precautions

Use appropriate containment to avoid environmental contamination.

Prevent from spreading or entering drains, ditches or rivers.

6.3 Methods and materials for containment and cleaning up

Contain and collect as any solid. Avoid generation of dust during clean-up of spills. Where possible allow molten material to solidify naturally.

Practice good housekeeping - spillage can be slippery on smooth surface either wet or dry.

6.4 Reference to other sections

See Section 7 for information on safe handling.

See section 8 for information on personal protection equipment.

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See Section 13 for information on disposal.

Section 7 – Handling and Storage

7.1 Precautions for safe handling

Additional hazards when processed:

Product dust is combustible. Use care during processing to minimize generation of dust. Welding, cutting, or processing this material may release dust or fumes that are hazardous. As shipped this product does not pose any significant health hazards. Avoid skin and eye contact with dusts to prevent mechanical irritation. Risk of electric shock when welding. Arc rays and sparks can burn skin. Fumes from welding, or processing of this material can be harmful if inhaled. Inhalation of metal dusts and fumes may cause a condition commonly known as metal fume fever with symptoms which resemble influenza. Symptoms may be delayed 4-12 hours and begin with a sudden onset of thirst, and a sweet, metallic or foul taste in the mouth. Other symptoms may include upper respiratory tract irritation accompanied by coughing and a dryness of the mucous membranes, lassitude and a generalized feeling of malaise. Fever, chills, muscular pain, mild to severe headache, nausea, occasional vomiting, exaggerated mental activity, profuse sweating, excessive urination, diarrhea and prostration may also occur. See ANSI Z49.1-1967 Safety in Welding and Cutting published by the American Welding Society and OSHA Hazard Communication Standard 1910.1200 for additional details regarding the handling and storage of this material.

Hygiene Measures:

Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Do not eat, drink or smoke when using this product.

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions	Store in a dry, cool place
Incompatible materials	Strong acids. Strong bases. Strong oxidizers. Corrosive substances in prolonged contact with metals may produce flammable hydrogen gas. Water (when product is in dust/molten form).

7.3 Specific end use(s)

The identified uses for this product are detailed in section 1.2.

Section 8 – Exposure Controls, Personal Protection

8.1 Control parameters

Occupational exposure limits values

Copper (7440-50-8)		
USA ACGIH	ACGIH TWA (mg/m³)	0.2 mg/m³(fume)
USA OSHA	OSHA PEL (TWA) (mg/m³)	0.1 mg/m³ (fume) 1 mg/m³(dust and mist)
Manganese (7439-96-5)		
USA ACGIH	ACGIH TWA (mg/m³)	0.02 mg/m³(respirable fraction) 0.1 mg/m³(inhalable fraction)
USA OSHA	OSHA PEL (TWA) (mg/m³)	5 mg/m³
Silicon (7440-21-3)		
USA ACGIH	ACGIH TWA (mg/m³)	15 mg/m³(total dust) 5 mg/m³(respirable fraction)
Nickel (7440-02-0)		
USA ACGIH	ACGIH TWA (mg/m³)	1.5 mg/m³(inhalable fraction)
USA OSHA	OSHA PEL (TWA) (mg/m³)	1 mg/m³
Chromium (7440-47-3)		
USA ACGIH	ACGIH TWA (mg/m³)	0.5 mg/m³
USA OSHA	OSHA PEL (TWA) (mg/m³)	1 mg/m³
Molybdenum (7439-98-7)		

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SAFETY DATA SHEET

Section 1 – Chemical Product and Company Identification

1.1 Product Identifier

Product name	Carbon Steel Welding Wire
Other means of identification	Viking ER70S-6

1.2 Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses	For welding consumables and related products distributed by Davis Wire Company at the following locations

1.3 Details of the supplier of the SDS

1.3.1	
Company name	DW-National Standard
Address	1631 Lake Street, Niles, MI 49120
1.3.2	
Company name	DW-National Standard
Address	3602 N. Perkins Rd, Stillwater, OK 74075
1.3.3	
Company name	Davis Wire
Address	5555 North Irwindale Avenue, Irwindale, CA 91706
Tel	(800) 777-1618

1.4 Emergency telephone number

Call the emergency number	(800) 777-1618

Section 2 – Hazards Identification

2.1 Classification of the substance or mixture

Classification acc. to GHS-US	Not classified

2.2 Label Elements

Symbol(s)	No labeling applicable
Signal Words	No signal word applicable
Hazard Statement	**PHYSICAL HAZARDS:** Not classified as a physical hazard under GHS criteria. **HEALTH HAZARDS:** Not classified as a health hazard under GHS criteria. **ENVIRONMENTAL HAZARDS:** Not classified as an environmental hazard under GHS criteria.
GHS Precautionary Statements	
Prevention	P260: Do not breathe dust/fume/gas/mist/vapours/spray. P261: Avoid breathing dust/fume/gas/mist/vapours/spray. P264: Wash hands thoroughly after handling. P270: Do not eat, drink or smoke when using this product. P271: Use only outdoors or in a well-ventilated area.
Response	P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing. P312: Call a POISON CENTER/doctor if you feel unwell. P314: Get medical advice and attention if you feel unwell.
Storage	P403+P235: Store in a well ventilated place. Keep cool. P405: Store locked up.
Disposal	P501: Dispose of contents and container to appropriate waste site or reclaimer in accordance with local and national regulations.

2.3 Other hazard

RADNOR.

Revision Date: 07/03/2019

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)
None present or none present in regulated quantities.

CERCLA Hazardous Substance List (40 CFR 302.4):

Chemical Identity	Reportable quantity
Manganese	Included in the regulation but with no data values. See regulation for further details.

Superfund Amendments and Reauthorization Act of 1986 (SARA)
Hazard categories
Not classified
Not classified

SARA 302 Extremely Hazardous Substance
None present or none present in regulated quantities.

SARA 304 Emergency Release Notification

Chemical Identity	Reportable quantity
Manganese	Included in the regulation but with no data values. See regulation for further details.

SARA 311/312 Hazardous Chemical

Chemical Identity	Threshold Planning Quantity
Iron	10000 lbs
Manganese	10000 lbs
Silicon	10000 lbs

SARA 313 (TRI Reporting)

Chemical Identity	Reporting threshold for other users	Reporting threshold for manufacturing and processing
Manganese	10000 lbs	25000 lbs.

Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3)
None present or none present in regulated quantities.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130):
None present or none present in regulated quantities.

US State Regulations
US. California Proposition 65
No ingredient requiring a warning under CA Prop 65.

WARNING: This product contains or produces a chemical known to the State of California to cause cancer and birth defects (or other reproductive harm). (California Health & Safety Code Section 25249.5 et seq.)
WARNING: Cancer and Reproductive Harm – www.P65Warnings.ca.gov

US. New Jersey Worker and Community Right-to-Know Act
Chemical Identity
Manganese

US. Massachusetts RTK - Substance List
No ingredient regulated by MA Right-to-Know Law present.

US. Pennsylvania RTK - Hazardous Substances
Chemical Identity
Manganese

US. Rhode Island RTK

and form from the ingredients listed in Section 3. Decomposition products of normal operation include those originating from the volatilization, reaction, or oxidation of the materials shown in Section 3, plus those from the base metal and coating, etc., as noted above. Reasonably expected fume constituents produced during arc welding and brazing include the oxides of iron, manganese and other metals present in the welding consumable or base metal. Hexavalent chromium compounds may be in the welding or brazing fume of consumables or base metals which contain chromium. Gaseous and particulate fluoride may be in the fume of consumables or flux materials which contain fluoride. Gaseous reaction products may include carbon monoxide and carbon dioxide. Ozone and nitrogen oxides may be formed by the radiation from the arc associated with welding.

11. TOXICOLOGICAL INFORMATION

General Information: The International Agency for Research on Cancer (IARC) has determined welding fumes and ultraviolet radiation from welding are carcinogenic to humans (Group 1). According to IARC, welding fumes cause cancer of the lung and positive associations have been observed with cancer of the kidney. Also according to IARC, ultraviolet radiation from welding causes ocular melanoma. IARC identifies gouging, brazing, carbon arc or plasma arc cutting, and soldering as processes closely related to welding. Read and understand the manufacturer's instructions, Safety Data Sheets and the precautionary labels before using this product.

Information on likely routes of exposure

Inhalation: Potential chronic health hazards related to the use of welding consumables are most applicable to the inhalation route of exposure. Refer to inhalation statements in Section 11.

Skin Contact: Arc rays can burn skin. Skin cancer has been reported.

Eye contact: Arc rays can injure eyes.

Ingestion: Health injuries from ingestion are not known or expected under normal use.

Symptoms related to the physical, chemical and toxicological characteristics

Inhalation: Short-term (acute) overexposure to fumes and gases from welding and allied processes may result in discomfort such as metal fume fever, dizziness, nausea, or dryness or irritation of nose, throat, or eyes. May aggravate pre-existing respiratory problems (e.g. asthma, emphysema). Long-term (chronic) overexposure to fumes and gases from welding and allied processes can lead to siderosis (iron deposits in lung), central nervous system effects, bronchitis and other pulmonary effects.

Information on toxicological effects

Acute toxicity (list all possible routes of exposure)

Oral

Product: Not classified

Specified substance(s):

Iron LD 50 (Rat): 98.6 g/kg

Dermal

Product: Not classified

Inhalation

Product: Not classified

Repeated dose toxicity
Product: Not classified

Skin Corrosion/Irritation
Product: Not classified

Serious Eye Damage/Eye Irritation
Product: Not classified

Respiratory or Skin Sensitization
Product: Not classified

Carcinogenicity
Product: Arc rays: Skin cancer has been reported.

IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:
No carcinogenic components identified

US. National Toxicology Program (NTP) Report on Carcinogens:
No carcinogenic components identified

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050):
No carcinogenic components identified

Germ Cell Mutagenicity
In vitro
Product: Not classified

In vivo
Product: Not classified

Reproductive toxicity
Product: Not classified

Specific Target Organ Toxicity - Single Exposure
Product: Not classified

Specific Target Organ Toxicity - Repeated Exposure
Product: Not classified

Aspiration Hazard
Product: Not classified
Other effects: Organic polymers may be used in the manufacture of various welding consumables. Overexposure to their decomposition byproducts may result in a condition known as polymer fume fever. Polymer fume fever usually occurs within 4 to 8 hours of exposure with the presentation of flu like symptoms, including mild pulmonary irritation with or without an increase in body temperature. Signs of exposure can include an increase in white blood cell count. Resolution of symptoms typically occurs quickly, usually not lasting longer than 48 hours.

Symptoms related to the physical, chemical and toxicological characteristics under the condition of use

Inhalation:
Specified substance(s):

lowered the Threshold Limit Value (TLV) for hexavalent chromium from 50 micrograms per cubic meter of air (50 µg/m³) to 0.2 µg/m³. At these new limits, CrVI exposures at or above the TLV may be possible in cases where adequate ventilation is not provided. CrVI compounds are on the IARC and NTP lists as posing a lung cancer and sinus cancer risk. Workplace conditions are unique and welding fume exposures levels vary. Workplace exposure assessments must be conducted by a qualified professional, such as an industrial hygienist, to determine if exposures are below applicable limits and to make recommendations when necessary for preventing overexposures.

Eye/face protection: Wear helmet or use face shield with filter lens shade number 12 or darker for open arc processes – or follow the recommendations as specified in ANSI Z49.1, Section 4, based on your process and settings. No specific lens shade recommendation for submerged arc or electroslag processes. Shield others by providing appropriate screens and flash goggles.

Skin Protection

Hand Protection: Wear protective gloves. Suitable gloves can be recommended by the glove supplier.

Other: **Protective Clothing:** Wear hand, head, and body protection which help to prevent injury from radiation, open flames, hot surfaces, sparks and electrical shock. See Z49.1. At a minimum, this includes welder's gloves and a protective face shield when welding, and may include arm protectors, aprons, hats, shoulder protection, as well as dark substantial clothing when welding, brazing and soldering. Wear dry gloves free of holes or split seams. Train the operator not to permit electrically live parts or electrodes from contacting the skin . . . or clothing or gloves if they are wet. Insulate yourself from the work piece and ground using dry plywood, rubber mats or other dry insulation.

Respiratory Protection: Keep your head out of fumes. Use enough ventilation and local exhaust to keep fumes and gases from your breathing zone and the general area. An approved respirator should be used unless exposure assessments are below applicable exposure limits.

Hygiene measures: Do not eat, drink or smoke when using the product. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Determine the composition and quantity of fumes and gases to which workers are exposed by taking an air sample from inside the welder's helmet if worn or in the worker's breathing zone. Improve ventilation if exposures are not below limits. See ANSI/AWS F1.1, F1.2, F1.3 and F1.5, available from the American Welding Society, www.aws.org.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Solid welding wire or rod.
Physical state:	Solid
Form:	Solid
Color:	No data available.
Odor:	No data available.
Odor threshold:	No data available.
pH:	No data available.

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Melting point/freezing point:	No data available.
Initial boiling point and boiling range:	No data available.
Flash Point:	No data available.
Evaporation rate:	No data available.
Flammability (solid, gas):	No data available.
Upper/lower limit on flammability or explosive limits	
Flammability limit - upper (%):	No data available.
Flammability limit - lower (%):	No data available.
Explosive limit - upper (%):	No data available.
Explosive limit - lower (%):	No data available.
Vapor pressure:	No data available.
Vapor density:	No data available.
Density:	No data available.
Relative density:	No data available.
Solubility(ies)	
Solubility in water:	No data available.
Solubility (other):	No data available.
Partition coefficient (n-octanol/water):	No data available.
Auto-ignition temperature:	No data available.
Decomposition temperature:	No data available.
Viscosity:	No data available.

10. STABILITY AND REACTIVITY

Reactivity:	The product is non-reactive under normal conditions of use, storage and transport.
Chemical Stability:	Material is stable under normal conditions.
Possibility of hazardous reactions:	None under normal conditions.
Conditions to avoid:	Avoid heat or contamination.
Incompatible Materials:	Strong acids. Strong oxidizing substances. Strong bases.
Hazardous Decomposition Products:	Fumes and gases from welding and its allied processes such as brazing and soldering cannot be classified simply. The composition and quantity of both are dependent upon the metal to which the joining or hot work is applied, the process, procedure - and where applicable - the electrode or consumable used. Other conditions which also influence the composition and quantity of the fumes and gases to which workers may be exposed include: coatings on the metal being welded or worked (such as paint, plating, or galvanizing), the number of operators and the volume of the work area, the quality and amount of ventilation, the position of the operator's head with respect to the fume plume, as well as the presence of contaminants in the atmosphere (such as chlorinated hydrocarbon vapors from cleaning and degreasing activities.) In cases where an electrode or other applied material is consumed, the fume and gas decomposition products generated are different in percent

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SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: Radnor® ER70S-6
Product Size: .035" (0.9 mm)

Other means of identification
SDS number: 200000000798

Recommended use and restriction on use
Recommended use: GMAW (Gas Metal Arc Welding)
Restrictions on use: Not known. Read this SDS before using this product.

Manufacturer/Importer/Supplier/Distributor Information

Company Name:	Radnor Welding Products
Address:	P.O. Box 6675 Radnor, PA 19087 USA
Telephone:	+1 (866) 924-7427

Emergency telephone number:
+1 (866) 734-3438

2. HAZARDS IDENTIFICATION

Classified according to the criteria of the Globally Harmonized System of Classification and Labeling of Chemicals (GHS), The United States Occupational Safety and Health Administration's Hazard Communication Standard (29 CFR 1910.1200), Canada's Hazardous Product Regulations and Mexico's Harmonized System for the Identification and Communication of Hazards and Risks from Hazardous Chemicals in the Workplace.

Hazard Classification	Not classified as hazardous according to applicable GHS hazard classification criteria.
Label Elements	
Hazard Symbol:	No symbol
Signal Word:	No signal word.
Hazard Statement:	Not applicable
Precautionary Statements:	Not applicable
Other hazards which do not result in GHS classification:	Electrical Shock can kill. If welding must be performed in damp locations or with wet clothing, on metal structures or when in cramped positions such as sitting, kneeling or lying, or if there is a high risk of unavoidable or accidental contact with work piece, use the following equipment: Semiautomatic DC Welder, DC Manual (Stick) Welder, or AC Welder with Reduced Voltage Control. Arc rays can injure eyes and burn skin. Welding arc and sparks can ignite combustibles and flammable materials. Overexposure to welding fumes and gases can be hazardous. Read and understand the manufacturer's instructions, Safety Data Sheets and the precautionary labels before using this product. Refer to Section 8.

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Substance(s) formed under the conditions of use:

The welding fume produced from this welding electrode may contain the following constituent(s) and/or their complex metallic oxides as well as solid particles or other constituents from the consumables, base metal, or base metal coating not listed below. Fume from this product may contain low levels of copper, typically less than 1% by weight. Overexposure to copper may cause metal fume fever, as well as skin, eye and respiratory tract irritation.

Chemical Identity	CAS-No.
Carbon dioxide	124-38-9
Carbon monoxide	630-08-0
Nitrogen dioxide	10102-44-0
Ozone	10028-15-6
Manganese	7439-96-5

3. COMPOSITION / INFORMATION ON INGREDIENTS

Reportable Hazardous Ingredients
Mixtures

Chemical Identity	CAS number	Content in percent (%)*
Iron	7439-89-6	50 - <100%
Manganese	7439-96-5	1 - <5%
Silicon	7440-21-3	0.1 - <1%

* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

Composition Comments:

The term "Hazardous Ingredients" should be interpreted as a term defined in Hazard Communication standards and does not necessarily imply the existence of a welding hazard. The product may contain additional non-hazardous ingredients or may form additional compounds under the condition of use. Refer to Sections 2 and 8 for more information.

4. FIRST AID MEASURES

Ingestion:

Avoid hand, clothing, food, and drink contact with fluxes, metal fume or powder which can cause ingestion of particulate during hand to mouth activities such as drinking, eating, smoking, etc. If ingested, do not induce vomiting. Contact a poison control center. Unless the poison control center advises otherwise, wash out mouth thoroughly with water. If symptoms develop, seek medical attention at once.

Inhalation:

Move to fresh air if breathing is difficult. If breathing has stopped, perform artificial respiration and obtain medical assistance at once.

Skin Contact:

Remove contaminated clothing and wash the skin thoroughly with soap and water. For reddened or blistered skin, or thermal burns, obtain medical assistance at once.

Eye contact:

Dust or fume from this product should be flushed from the eyes with copious amounts of clean, tepid water until transported to an emergency medical facility. Do not allow victim to rub or keep eyes tightly closed. Obtain medical assistance at once.

Arc rays can injure eyes. If exposed to arc rays, move victim to dark room.

remove contact lenses as necessary for treatment, cover eyes with a padded dressing and rest. Obtain medical assistance if symptoms persist.

Most important symptoms/effects, acute and delayed

Symptoms: Short-term (acute) overexposure to fumes and gases from welding and allied processes may result in discomfort such as metal fume fever, dizziness, nausea, or dryness or irritation of nose, throat, or eyes. May aggravate pre-existing respiratory problems (e.g. asthma, emphysema). Long-term (chronic) overexposure to fumes and gases from welding and allied processes can lead to siderosis (iron deposits in lung), central nervous system effects, bronchitis and other pulmonary effects. Refer to Section 11 for more information.

Hazards: The hazards associated with welding and its allied processes such as soldering and brazing are complex and may include physical and health hazards such as but not limited to electric shock, physical strains, radiation burns (eye flash), thermal burns due to hot metal or spatter and potential health effects of overexposure to fumes, gases or dusts potentially generated during the use of this product. Refer to Section 11 for more information.

Indication of immediate medical attention and special treatment needed

Treatment: Treat symptomatically.

5. FIRE-FIGHTING MEASURES

General Fire Hazards: As shipped, this product is nonflammable. However, welding arc and sparks as well as open flames and hot surfaces associated with brazing and soldering can ignite combustible and flammable materials. Read and understand American National Standard Z49.1, "Safety in Welding, Cutting and Allied Processes" and National Fire Protection Association NFPA 51B, "Standard for Fire Prevention during Welding, Cutting and Other Hot Work" before using this product.

Suitable (and unsuitable) extinguishing media

Suitable extinguishing media: As shipped, the product will not burn. In case of fire in the surroundings: use appropriate extinguishing agent.

Unsuitable extinguishing media: Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical: Welding arc and sparks can ignite combustibles and flammable products.

Special protective equipment and precautions for firefighters

Special fire fighting procedures: Use standard firefighting procedures and consider the hazards of other involved materials.

Special protective equipment for fire-fighters: Selection of respiratory protection for fire fighting: follow the general fire precautions indicated in the workplace. Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures: If airborne dust and/or fume is present, use adequate engineering controls and, if needed, personal protection to prevent overexposure. Refer to recommendations in Section 8.

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Methods and material for containment and cleaning up: Absorb with sand or other inert absorbent. Stop the flow of material, if this is without risk. Clean up spills immediately, observing precautions in the personal protective equipment in Section 8. Avoid generating dust. Prevent product from entering any drains, sewers or water sources. Refer to Section 13 for proper disposal.

Environmental Precautions: Avoid release to the environment. Prevent further leakage or spillage if safe to do so. Do not contaminate water sources or sewer. Environmental manager must be informed of all major spillages.

7. HANDLING AND STORAGE

Precautions for safe handling: Prevent formation of dust. Provide appropriate exhaust ventilation at places where dust is formed.

Read and understand the manufacturer's instruction and the precautionary label on the product. See American National Standard Z49.1, "Safety in Welding, Cutting and Allied Processes" published by the American Welding Society, http://pubs.aws.org and OSHA Publication 2206 (29CFR1910); U.S. Government Printing Office, www.gpo.gov.

Conditions for safe storage, including any incompatibilities: Store in closed original container in a dry place. Store in accordance with local/regional/national regulations. Store away from incompatible materials.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Control Parameters

Occupational Exposure Limits: US

Chemical Identity	Type	Exposure Limit Values	Source
Manganese - Fume. - as Mn	Ceiling	5 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
	REL	1 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards (2005)
	STEL	3 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards (2005)
Manganese - Inhalable fraction. - as Mn	TWA	0.1 mg/m3	US. ACGIH Threshold Limit Values (03 2014)
Manganese - Respirable fraction. - as Mn	TWA	0.02 mg/m3	US. ACGIH Threshold Limit Values (03 2014)
Manganese	IDLH	500 mg/m3	US. NIOSH. Immediately Dangerous to Life or Health (IDLH) Values (10 2017)
Silicon - Total dust.	PEL	15 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
Silicon - Respirable fraction.	PEL	5 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
Silicon - Respirable.	REL	6 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards (2005)
Silicon - Total	REL	10 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards (2005)

Occupational Exposure Limits: Canada

Chemical Identity	Type	Exposure Limit Values	Source
Manganese - as Mn	TWA	0.2 mg/m3	Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2) (07 2009)
	TWA	0.2 mg/m3	Canada. British Columbia OELs. (Occupational Exposure Limits for

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	IDLH	1,200 ppm		US. NIOSH. Immediately Dangerous to Life or Health (IDLH) Values (10 2017)
Nitrogen dioxide	TWA	0.2 ppm		US. ACGIH Threshold Limit Values (02 2012)
	Ceiling	5 ppm	9 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
	STEL	1 ppm	1.8 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards (2005)
	IDLH	20 ppm		US. NIOSH. Immediately Dangerous to Life or Health (IDLH) Values (10 2017)
	IDLH	13 ppm		US. NIOSH. Immediately Dangerous to Life or Health (IDLH) Values (10 2017)
Ozone	PEL	0.1 ppm	0.2 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
	Ceil_Time	0.1 ppm	0.2 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards (2005)
	TWA	0.05 ppm		US. ACGIH Threshold Limit Values (03 2014)
	TWA	0.20 ppm		US. ACGIH Threshold Limit Values (03 2014)
	TWA	0.10 ppm		US. ACGIH Threshold Limit Values (03 2014)
	TWA	0.08 ppm		US. ACGIH Threshold Limit Values (03 2014)
	IDLH	5 ppm		US. NIOSH. Immediately Dangerous to Life or Health (IDLH) Values (10 2017)
Manganese - Fume. - as Mn	Ceiling		5 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
	REL		1 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards (2005)
	STEL		3 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards (2005)
Manganese - Inhalable fraction. - as Mn	TWA		0.1 mg/m3	US. ACGIH Threshold Limit Values (03 2014)
Manganese - Respirable fraction. - as Mn	TWA		0.02 mg/m3	US. ACGIH Threshold Limit Values (03 2014)
Manganese	IDLH		500 mg/m3	US. NIOSH. Immediately Dangerous to Life or Health (IDLH) Values (10 2017)

Additional exposure limits under the conditions of use: Canada

Chemical Identity	Type	Exposure Limit Values		Source
Carbon dioxide	STEL	30,000 ppm	54,000 mg/m3	Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2) (07 2009)
	TWA	5,000 ppm	9,000 mg/m3	Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2) (07 2009)
	TWA	5,000 ppm		Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
	STEL	15,000 ppm		Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
	TWA	5,000 ppm		Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act) (03 2011)
	STEL	30,000 ppm		Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act) (03 2011)
	STEL	30,000 ppm		Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)

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Product information

Technical Details

Brand	TCP Global
Item Weight	2.85 pounds
Package Dimensions	9.1 x 6 x 5.1 inches
Item model number	TCP G6600-14
Manufacturer Part Number	G6600-14
Folding	No

Additional Information

ASIN	B001OZMOV8
Customer Reviews	73 ratings 4.4 out of 5 stars
Best Sellers Rank	#41,226 in Automotive (See Top 100 in Automotive) #64 in Body Repair Paint Spray Guns
Shipping Weight	2.85 pounds (View shipping rates and policies)
Date First Available	January 4, 2009

Warranty & Support

Warranty, Parts: Parts

Product Warranty: For warranty information about this product, please click here

Feedback

If you are a seller for this product, would you like to **suggest updates through seller support**?
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Videos

Page 1 of 2

Videos for this product

Customer Review: Excellent gun

Lance

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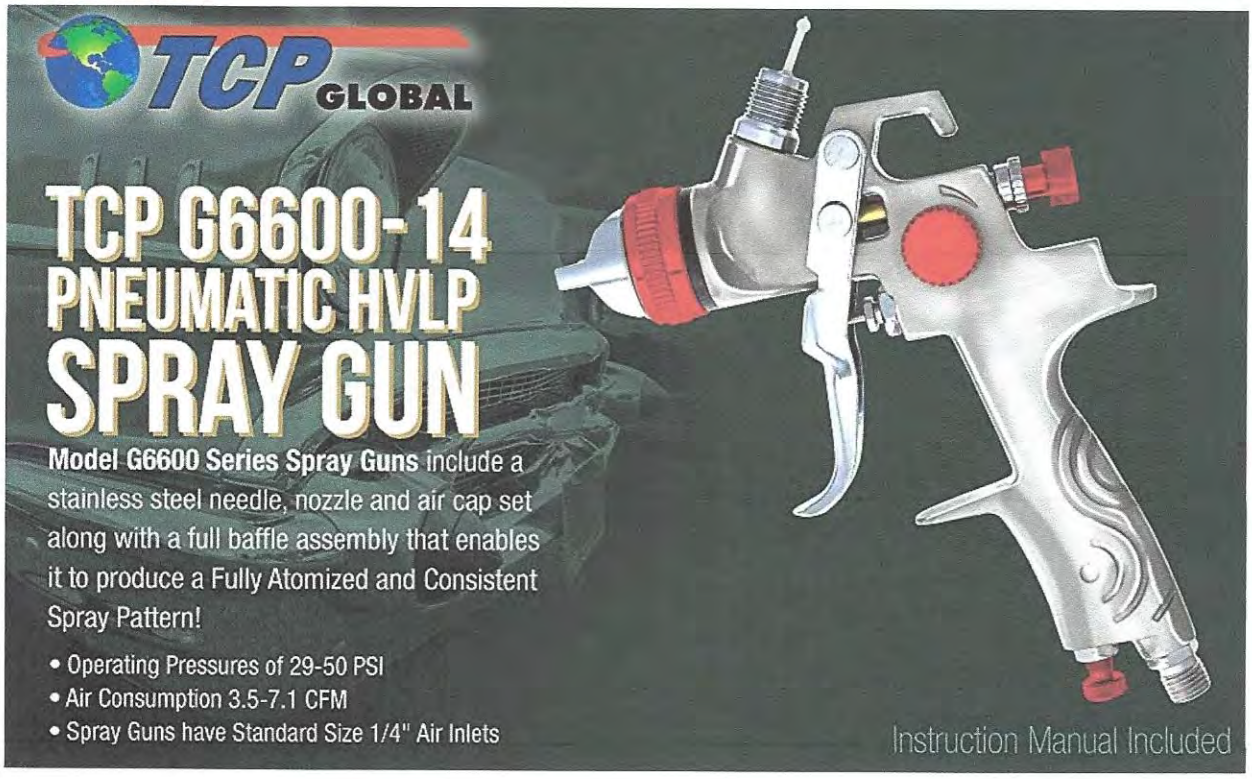

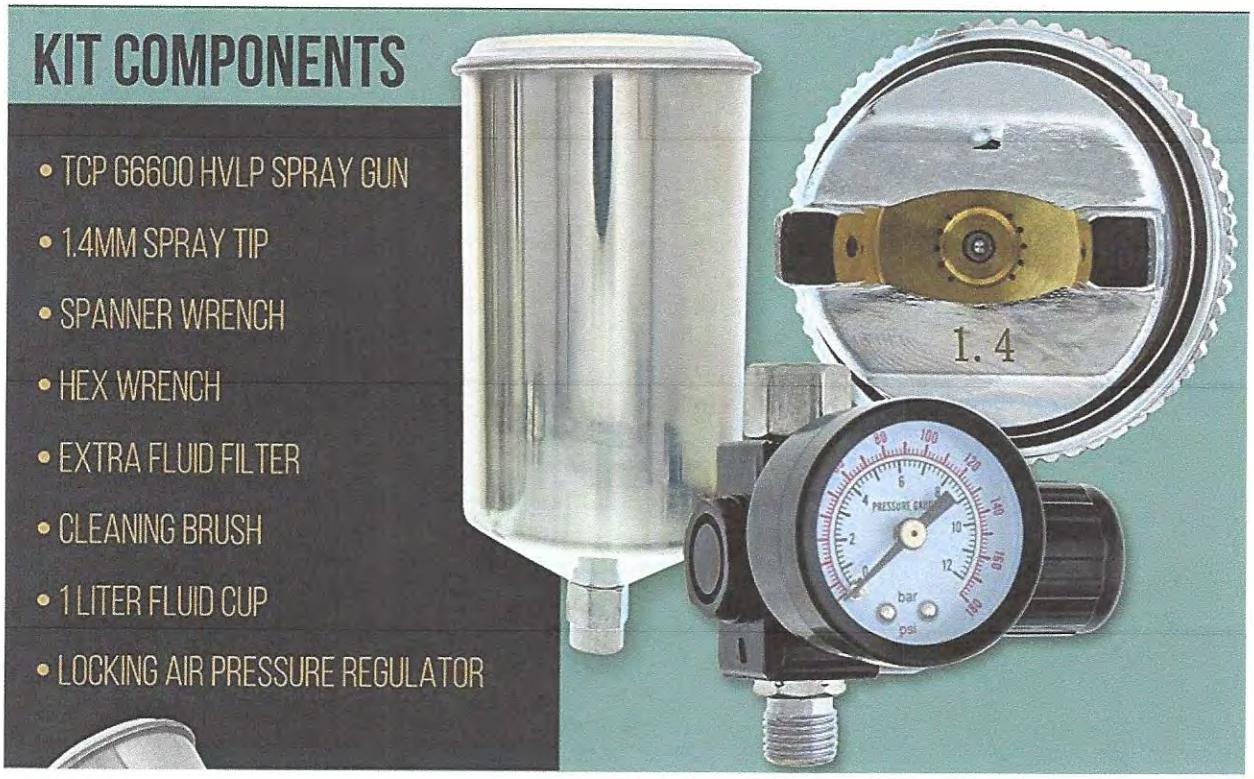
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• SPANNER WRENCH
• HEX WRENCH
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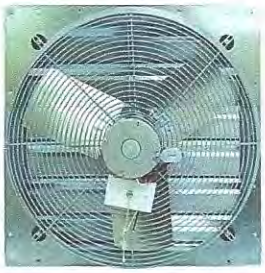

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Order 11-5-19

TPI Corporation CE30-DS Direct Drive Exhaust Fan, Shutter Mounted, Single Phase, 30" Diameter, 120 Volt

by TPI

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Size: **Shutter Mounted**

Guard Mounted | **Shutter Mounted** | Venturi Mounted | Without Guard/Shutter

Style: **30 Inch**

10 Inch | 12 Inch | 14 Inch | 16 Inch | 18 Inch | 20 Inch | 24 Inch | **30 Inch** | 42 Inch | 54 Inch

Color: **Direct Drive**

- Pull-Chain Switch
- Eliminates Need for External Framing and Shutter
- No Cord-Junction Box Provided for Direct Wiring
- Permanently Lubricated Motor
- 2-Speed Sleeve Bearing Permanent Split Capacitor.Rough-in hole size is 1/2 inch inch larger than fan blade size

Product Specifications

Color	Direct Drive
EAN	0686334798655
Finish Type	Gray
Input Voltage	120 volts
Item Diameter	30 inches
Item Weight	50.0 pounds
Material	Steel
Model Number	CE30-DS
Number of Items	1
Part Number	CE30-DS
Size	Shutter Mounted
Style	30 Inch
UPC	686334798655

See less

Specification for this product family

Brand Name	TPI
UNSPSC Code	32000000

See more product details

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213
$174.98

Ad feedback

Cord	No cord, junction box provided for direct wiring
Blades	Aluminum (3)
Blade guards	Steel spiral wire
Cubic feet per minute (CFM)	3950 / 3080
Weight	54 lbs.
Dimensions	33.125 x 33.125 x 13.305 inches (H x W x D)

H is height, the vertical distance from lowest to highest point; W is width, the horizontal distance from left to right; D is depth, the horizontal distance from front to back.

Industrial fans are used in workplace environments to exhaust fumes or direct air flow. Most industrial fans have coated metal parts and lubricated motors that are permanently sealed to help protect against environmental hazards, such as dirt and airborne debris or corrosive fumes. They can have fan blade cages that meet workplace safety standards, as well as a variety of mounting mechanisms for precise placement to direct large volumes of air flow. Electronic circuitry for industrial fans matches the power specifications found in the workplace and provides the initial torque needed to start up a large blade fan. Industrial fans are used in warehouses, gyms, and other commercial environments to ventilate spaces and to circulate air.

TPI Corporation manufactures industrial and commercial electrical heaters, process heat ovens, ventilation products and fans, lighting equipment, and thermostatic controls. The company, founded in 1950, is headquartered in Johnson City, TN.

Product details

Size: **Shutter Mounted** | Style: **30 Inch** | Color: **Direct Drive**

Product Dimensions: 34 x 34 x 13 inches ; 50 pounds

Shipping Weight: 50.1 pounds (View shipping rates and policies)

Domestic Shipping: Currently, item can be shipped only within the U.S. and to APO/FPO addresses. For APO/FPO shipments, please check with the manufacturer regarding warranty and support issues.

International Shipping: This item can be shipped to select countries outside of the U.S. Learn More

ASIN: B000V3ZP3I

Item model number: CE30-DS

Average Customer Review: 70 customer reviews

Amazon Best Sellers Rank: #152,835 in Industrial & Scientific (See Top 100 in Industrial & Scientific)
#781 in Household Ventilation Fans

Manufacturer's warranty can be requested from customer service. Click here to make a request to customer service.

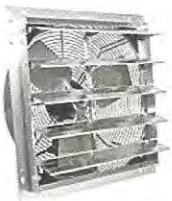
Would you like to **tell us about a lower price**?

Sponsored products related to this item

VES Exhaust Fan, Shutter Fan, Box Fan, with 9 Foot Cord 3 Speed for Indoor or Outdo...
15
$289.99

TPI Corporation CE-30B Commercial Exhaust Fan, Single Phase, 30" Diameter, 120 Volt
1
$550.00

TPI Corporation CE14-DS Direct Drive Exhaust Fan, Shutter Mounted, Single Phase, 14...
21
$247.49



VES 24" Exhaust Shutter Fan, Wall Mount, 3 Speed
50
$239.99

500sqft MWS Reflective Foam Core 1/4 inch White Insulation Barrier 4x125NP
$244.44

OdorS
Variou
(with C
Conne
$79.00
Ad feedback

Customer Questions & Answers

See questions and answers

SAFETY DATA SHEET

Date of issue/Date of revision **18 January 2019**
Version 14

Section 1. Identification

Product name	: ACRYLIC MODIFIED ALKYD ENAMEL
Product code	: ALK-200M-1
Other means of identification	: Not available.
Product type	: Liquid.

Relevant identified uses of the substance or mixture and uses advised against

Product use	: Industrial applications.
Use of the substance/ mixture	: Coating.
Uses advised against	: Not applicable.

Manufacturer	: PPG Industries, Inc. One PPG Place, Pittsburgh, PA 15272
Emergency telephone number	: (412) 434-4515 (U.S.) (514) 645-1320 (Canada) 01-800-00-21-400 or + 52 55 5559 1588 (Mexico)
Technical Phone Number	: 1-800-647-6050

Section 2. Hazards identification

OSHA/HCS status	: This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
Classification of the substance or mixture	: FLAMMABLE LIQUIDS - Category 2 ACUTE TOXICITY (inhalation) - Category 4 SKIN IRRITATION - Category 2 EYE IRRITATION - Category 2A RESPIRATORY SENSITIZATION - Category 1 SKIN SENSITIZATION - Category 1 CARCINOGENICITY - Category 1B TOXIC TO REPRODUCTION (Fertility) - Category 2 TOXIC TO REPRODUCTION (Unborn child) - Category 2 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) (hearing organs) - Category 2

Section 2. Hazards identification

Percentage of the mixture consisting of ingredient(s) of unknown toxicity: 99.5% (Oral), 100% (Dermal), 100% (Inhalation)

This product contains TiO2 which has been classified as a GHS Carcinogen Category 2 based on its IARC 2B classification. For many PPG products, TiO2 is utilized as a raw material in a liquid coating formulation. In this case, the TiO2 particles are bound in a matrix with no meaningful potential for human exposure to unbound particles of TiO2 when the product is applied with a brush or roller. Sanding the coating surface or mist from spray applications may be harmful depending on the duration and level of exposure and require the use of appropriate personal protective equipment and/or engineering controls (see Section 8).

GHS label elements

Hazard pictograms :

Signal word : Danger

Hazard statements : Highly flammable liquid and vapor.
Harmful if inhaled.
Causes serious eye irritation.
Causes skin irritation.
May cause allergy or asthma symptoms or breathing difficulties if inhaled.
May cause an allergic skin reaction.
May cause cancer.
Suspected of damaging fertility or the unborn child.
May cause respiratory irritation.
May cause drowsiness or dizziness.
May cause damage to organs through prolonged or repeated exposure. (hearing organs)

Precautionary statements

Prevention : Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves. Wear eye or face protection. Wear protective clothing. Wear respiratory protection. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use explosion-proof electrical, ventilating, lighting and all material-handling equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Keep container tightly closed. Use only outdoors or in a well-ventilated area. Do not breathe vapor. Wash hands thoroughly after handling. Contaminated work clothing must not be allowed out of the workplace.

Response : Get medical attention if you feel unwell. IF exposed or concerned: Get medical attention. IF INHALED: If breathing is difficult, remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or physician if you feel unwell. If experiencing respiratory symptoms: Call a POISON CENTER or physician. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. IF ON SKIN: Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation or rash occurs: Get medical attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.

Storage : Store locked up. Store in a well-ventilated place. Keep cool.

Disposal : Dispose of contents and container in accordance with all local, regional, national and international regulations.

Section 2. Hazards identification

Supplemental label elements : Sanding and grinding dusts may be harmful if inhaled. Repeated exposure to high vapor concentrations may cause irritation of the respiratory system and permanent brain and nervous system damage. Inhalation of vapor/aerosol concentrations above the recommended exposure limits causes headaches, drowsiness and nausea and may lead to unconsciousness or death. Avoid contact with skin and clothing. Wash thoroughly after handling. Emits toxic fumes when heated. DANGER - RAGS, STEEL WOOL OR WASTE SOAKED WITH THIS PRODUCT MAY SPONTANEOUSLY CATCH FIRE IF IMPROPERLY DISCARDED. IMMEDIATELY AFTER EACH USE, PLACE RAGS, STEEL WOOL OR WASTE IN A SEALED WATER-FILLED METAL CONTAINER.

Hazards not otherwise classified : Prolonged or repeated contact may dry skin and cause irritation.

Section 3. Composition/information on ingredients

Substance/mixture : Mixture

Product name : ACRYLIC MODIFIED ALKYD ENAMEL

Ingredient name	%	CAS number
xylene	≥20 - ≤50	1330-20-7
2-methoxy-1-methylethyl acetate	≥20 - ≤50	108-65-6
n-butyl acetate	≥10 - ≤20	123-86-4
diiron trioxide	≥10 - ≤20	1309-37-1
titanium dioxide	≥10 - ≤20	13463-67-7
acetone	≥10 - ≤20	67-64-1
butanone	≥10 - ≤20	78-93-3
heptan-2-one	≥5.0 - ≤10	110-43-0
ethylbenzene	≥5.0 - ≤9.9	100-41-4
Solvent naphtha (petroleum), light aromatic	≥5.0 - ≤10	64742-95-6
2-butoxyethanol	≥5.0 - ≤7.3	111-76-2
carbon black, respirable powder	≥1.0 - ≤5.0	1333-86-4
Aluminium powder (stabilized)	≥1.0 - ≤5.0	7429-90-5
1,2,4-trimethylbenzene	≥1.0 - ≤4.4	95-63-6
barium sulfate	≥1.0 - ≤5.0	7727-43-7
IRGAZIN DPP ORANGE 16A	≥1.0 - ≤5.0	84632-59-7
aluminium hydroxide	≥1.0 - ≤5.0	21645-51-2
1,2,4,5-tetramethylbenzene	≥1.0 - ≤5.0	95-93-2
toluene	≥1.0 - ≤5.0	108-88-3
Naphtha (petroleum), hydrotreated heavy	≥1.0 - ≤5.0	64742-48-9
Solvent naphtha (petroleum), heavy arom.	≥1.0 - ≤4.8	64742-94-5
zinc sulphide	≥1.0 - ≤5.0	1314-98-3
Fatty acids, C9-13-neo-, cobalt salts	<1.0	68955-83-9
naphthalene	<1.0	91-20-3
neodecanoic acid, cobalt salt	<1.0	27253-31-2
cumene	<1.0	98-82-8

SUB codes represent substances without registered CAS Numbers.

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

Section 3. Composition/information on ingredients

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

If ingestion, irritation, any type of overexposure or symptoms of overexposure occur during or persists after use of this product, contact a POISON CONTROL CENTER, EMERGENCY ROOM OR PHYSICIAN immediately; have Safety Data Sheet information available. Never give anything by mouth to an unconscious or convulsing person.

Description of necessary first aid measures

Eye contact : Remove contact lenses, irrigate copiously with clean, fresh water, holding the eyelids apart for at least 10 minutes and seek immediate medical advice.

Inhalation : Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.

Skin contact : Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners.

Ingestion : If swallowed, seek medical advice immediately and show this container or label. Keep person warm and at rest. Do NOT induce vomiting.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact : Causes serious eye irritation.

Inhalation : Harmful if inhaled. Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness. May cause respiratory irritation. May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Skin contact : Causes skin irritation. Defatting to the skin. May cause an allergic skin reaction.

Ingestion : Can cause central nervous system (CNS) depression.

Over-exposure signs/symptoms

Eye contact : Adverse symptoms may include the following:
pain or irritation
watering
redness

Inhalation : Adverse symptoms may include the following:
respiratory tract irritation
coughing
wheezing and breathing difficulties
asthma
nausea or vomiting
headache
drowsiness/fatigue
dizziness/vertigo
unconsciousness
reduced fetal weight
increase in fetal deaths
skeletal malformations

Section 4. First aid measures

Skin contact : Adverse symptoms may include the following:
irritation
redness
dryness
cracking
reduced fetal weight
increase in fetal deaths
skeletal malformations

Ingestion : Adverse symptoms may include the following:
reduced fetal weight
increase in fetal deaths
skeletal malformations

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician : In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

Specific treatments : No specific treatment.

Protection of first-aiders : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media : Use dry chemical, CO_2, water spray (fog) or foam.

Unsuitable extinguishing media : Do not use water jet.

Specific hazards arising from the chemical : Highly flammable liquid and vapor. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. Runoff to sewer may create fire or explosion hazard. This material is harmful to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

Hazardous thermal decomposition products : Decomposition products may include the following materials:
carbon oxides
nitrogen oxides
sulfur oxides
halogenated compounds
metal oxide/oxides

Section 5. Fire-fighting measures

Special protective actions for fire-fighters : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

Environmental precautions : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

Small spill : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Large spill : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

Section 7. Handling and storage

Protective measures : Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems or asthma, allergies or chronic or recurrent respiratory disease should not be employed in any process in which this product is used. Avoid exposure - obtain special instructions before use. Avoid exposure during pregnancy. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.

Special precautions : Ingestion of product or cured coating may be harmful. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. Vapors are heavier than air and may spread along floors. Materials such as cleaning rags, paper wipes and protective clothing, which are contaminated with the product may spontaneously self-ignite some hours later. To avoid the risks of fires, all contaminated materials should be stored in purpose-built containers or in metal containers with tight-fitting, self-closing lids. Contaminated materials should be removed from the workplace at the end of each working day and be stored outside. If this material is part of a multiple component system, read the Safety Data Sheet(s) for the other component or components before blending as the resulting mixture may have the hazards of all of its parts.

Advice on general occupational hygiene : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Conditions for safe storage, including any incompatibilities : Do not store above the following temperature: 50°C (122°F). Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Section 8. Exposure controls/personal protection

Ingredient name	Exposure limits
xylene	**ACGIH TLV (United States, 3/2018).** STEL: 651 mg/m³ 15 minutes. STEL: 150 ppm 15 minutes. TWA: 434 mg/m³ 8 hours. TWA: 100 ppm 8 hours. **OSHA PEL (United States, 5/2018).** TWA: 435 mg/m³ 8 hours. TWA: 100 ppm 8 hours.
2-methoxy-1-methylethyl acetate	**IPEL (PPG, 10/2017). Absorbed through skin.** TWA: 30 ppm STEL: 90 ppm
n-butyl acetate	**OSHA PEL (United States, 5/2018).** TWA: 710 mg/m³ 8 hours. TWA: 150 ppm 8 hours. **ACGIH TLV (United States, 3/2018).** STEL: 150 ppm 15 minutes. TWA: 50 ppm 8 hours.
diiron trioxide	**ACGIH TLV (United States, 3/2018).** TWA: 5 mg/m³ 8 hours. Form: Respirable fraction **OSHA PEL (United States, 5/2018).** TWA: 10 mg/m³ 8 hours.
titanium dioxide	**OSHA PEL (United States, 5/2018).** TWA: 15 mg/m³ 8 hours. Form: Total dust **ACGIH TLV (United States, 3/2018).** TWA: 10 mg/m³ 8 hours.
acetone	**ACGIH TLV (United States, 3/2018).** STEL: 500 ppm 15 minutes. TWA: 250 ppm 8 hours. **OSHA PEL (United States, 5/2018).** TWA: 2400 mg/m³ 8 hours. TWA: 1000 ppm 8 hours.
butanone	**ACGIH TLV (United States, 3/2018).** STEL: 885 mg/m³ 15 minutes. STEL: 300 ppm 15 minutes. TWA: 590 mg/m³ 8 hours. TWA: 200 ppm 8 hours. **OSHA PEL (United States, 5/2018).** TWA: 590 mg/m³ 8 hours. TWA: 200 ppm 8 hours.
heptan-2-one	**ACGIH TLV (United States, 3/2018).** TWA: 233 mg/m³ 8 hours. TWA: 50 ppm 8 hours. **OSHA PEL (United States, 5/2018).** TWA: 465 mg/m³ 8 hours. TWA: 100 ppm 8 hours.
ethylbenzene	**ACGIH TLV (United States, 3/2018).** TWA: 20 ppm 8 hours. **OSHA PEL (United States, 5/2018).**

Section 8. Exposure controls/personal protection

	TWA: 435 mg/m³ 8 hours. TWA: 100 ppm 8 hours.
Solvent naphtha (petroleum), light aromatic	None.
2-butoxyethanol	**ACGIH TLV (United States, 3/2018).** TWA: 20 ppm 8 hours. **OSHA PEL (United States, 5/2018).** **Absorbed through skin.** TWA: 240 mg/m³ 8 hours. TWA: 50 ppm 8 hours.
carbon black, respirable powder	**ACGIH TLV (United States, 3/2018).** TWA: 3 mg/m³ 8 hours. Form: Inhalable fraction **OSHA PEL (United States, 5/2018).** TWA: 3.5 mg/m³ 8 hours.
aluminium powder (stabilised)	**ACGIH TLV (United States, 3/2018).** TWA: 1 mg/m³ 8 hours. Form: Respirable fraction **OSHA PEL (United States, 5/2018).** TWA: 5 mg/m³, (as Al) 8 hours. Form: Respirable fraction TWA: 15 mg/m³, (as Al) 8 hours. Form: Total dust
1,2,4-trimethylbenzene	**ACGIH TLV (United States, 3/2018).** TWA: 123 mg/m³ 8 hours. TWA: 25 ppm 8 hours.
barium sulfate	**ACGIH TLV (United States, 3/2018).** TWA: 5 mg/m³ 8 hours. Form: Inhalable fraction **OSHA PEL (United States, 5/2018).** TWA: 5 mg/m³ 8 hours. Form: Respirable fraction TWA: 15 mg/m³ 8 hours. Form: Total dust
IRGAZIN DPP ORANGE 16A	**ACGIH TLV (United States).** TWA: 10 mg/m³ Form: Inhalable TWA: 5 mg/m³ Form: Respirable **OSHA PEL (United States).** TWA: 5 mg/m³ Form: Respirable TWA: 15 mg/m³ Form: Total dust
aluminium hydroxide	**ACGIH TLV (United States, 3/2018).** TWA: 1 mg/m³ 8 hours. Form: Respirable fraction **ACGIH TLV (United States).** TWA: 1 mg/m³
1,2,4,5-tetramethylbenzene	None.
toluene	**OSHA PEL Z2 (United States, 2/2013).** AMP: 500 ppm 10 minutes. CEIL: 300 ppm TWA: 200 ppm 8 hours. **ACGIH TLV (United States, 3/2018).** TWA: 20 ppm 8 hours.
Naphtha (petroleum), hydrotreated heavy	None.
Solvent naphtha (petroleum), heavy arom.	None.

Section 8. Exposure controls/personal protection

zinc sulphide	None.
Fatty acids, C9-13-neo-, cobalt salts	**ACGIH TLV (United States, 3/2018).** TWA: 0.02 mg/m³, (as Co) 8 hours.
naphthalene	**ACGIH TLV (United States, 3/2018).** **Absorbed through skin.** TWA: 52 mg/m³ 8 hours. TWA: 10 ppm 8 hours. **OSHA PEL (United States, 5/2018).** TWA: 50 mg/m³ 8 hours. TWA: 10 ppm 8 hours.
neodecanoic acid, cobalt salt	**ACGIH TLV (United States, 3/2018).** TWA: 0.02 mg/m³, (as Co) 8 hours.
cumene	**ACGIH TLV (United States, 3/2018).** TWA: 50 ppm 8 hours. **OSHA PEL (United States, 5/2018).** **Absorbed through skin.** TWA: 245 mg/m³ 8 hours. TWA: 50 ppm 8 hours.

Key to abbreviations

A = Acceptable Maximum Peak
ACGIH = American Conference of Governmental Industrial Hygienists.
C = Ceiling Limit
F = Fume
IPEL = Internal Permissible Exposure Limit
OSHA = Occupational Safety and Health Administration.
R = Respirable
Z = OSHA 29 CFR 1910.1200 Subpart Z - Toxic and Hazardous Substances
S = Potential skin absorption
SR = Respiratory sensitization
SS = Skin sensitization
STEL = Short term Exposure limit values
TD = Total dust
TLV = Threshold Limit Value
TWA = Time Weighted Average

Consult local authorities for acceptable exposure limits.

Recommended monitoring procedures : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

Appropriate engineering controls : Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

Environmental exposure controls : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Section 8. Exposure controls/personal protection

Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection : Chemical splash goggles.

Skin protection

Hand protection : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

Gloves : butyl rubber

Body protection : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.

Other skin protection : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection : By spraying: air-fed respirator. By other operations than spraying, in well ventilated areas, air-fed respirators could be replaced by a combination charcoal filter and particulate filter mask. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Section 9. Physical and chemical properties

Appearance

Physical state : Liquid.

Color : Various

Odor : Not available.

Odor threshold : Not available.

pH : Not available.

Melting point : Not available.

Boiling point : >37.78°C (>100°F)

Flash point : Closed cup: -20°C (-4°F)

Material supports combustion. : Yes.

Auto-ignition temperature : Not available.

Decomposition temperature : Not available.

Flammability (solid, gas) : Not available.

Lower and upper explosive (flammable) limits : Not available.

Section 9. Physical and chemical properties

Evaporation rate	: Not available.
Vapor pressure	: Not available.
Vapor density	: Not available.
Relative density	: 1.15
Density (lbs / gal)	: 9.6
Solubility	: Insoluble in the following materials: cold water.
Partition coefficient: n-octanol/water	: Not available.
Viscosity	: Kinematic (40°C (104°F)): >0.21 cm^2/s (>21 cSt)
Volatility	: 64% (v/v), 56% (w/w)
% Solid. (w/w)	: 43.69

Physical property values shown in this section are calculated averages. For specific product information, contact your PPG Sales Representative.

Section 10. Stability and reactivity

Reactivity	: No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	: The product is stable.
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	: When exposed to high temperatures may produce hazardous decomposition products. Refer to protective measures listed in sections 7 and 8.
Incompatible materials	: Keep away from the following materials to prevent strong exothermic reactions: oxidizing agents, strong alkalis, strong acids.
Hazardous decomposition products	: Decomposition products may include the following materials: carbon monoxide, carbon dioxide, smoke, oxides of nitrogen.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
xylene	LD50 Dermal	Rabbit	>1.7 g/kg	-
	LD50 Oral	Rat	4.3 g/kg	-
2-methoxy-1-methylethyl acetate	LD50 Dermal	Rabbit	>5 g/kg	-
	LD50 Oral	Rat	8532 mg/kg	-
n-butyl acetate	LC50 Inhalation Vapor	Rat	>21.1 mg/l	4 hours
	LC50 Inhalation Vapor	Rat	2000 ppm	4 hours
	LD50 Dermal	Rabbit	>17600 mg/kg	-

Section 11. Toxicological information

diiron trioxide	LD50 Oral	Rat	10.768 g/kg	-
	LC50 Inhalation Dusts and mists	Rat	>5 mg/l	4 hours
titanium dioxide	LD50 Oral	Rat	10 g/kg	-
	LC50 Inhalation Dusts and mists	Rat	>6.82 mg/l	4 hours
	LD50 Dermal	Rabbit	>5000 mg/kg	-
acetone	LD50 Oral	Rat	>5000 mg/kg	-
	LC50 Inhalation Vapor	Rat	76000 mg/m³	4 hours
	LD50 Dermal	Rabbit	15.8 g/kg	-
butanone	LD50 Oral	Rat	5800 mg/kg	-
	LD50 Dermal	Rabbit	6480 mg/kg	-
heptan-2-one	LD50 Oral	Rat	2737 mg/kg	-
	LC50 Inhalation Vapor	Rat	>16.7 mg/l	4 hours
	LD50 Dermal	Rabbit	10.206 g/kg	-
ethylbenzene	LD50 Oral	Rat	1.6 g/kg	-
	LC50 Inhalation Vapor	Rat	17.8 mg/l	4 hours
	LD50 Dermal	Rabbit	17.8 g/kg	-
Solvent naphtha (petroleum), light aromatic	LD50 Oral	Rat	3.5 g/kg	-
	LD50 Dermal	Rabbit	3.48 g/kg	-
2-butoxyethanol	LD50 Oral	Rat	8400 mg/kg	-
	LD50 Dermal	Rabbit	1060 mg/kg	-
carbon black, respirable powder	LD50 Oral	Rat	470 mg/kg	-
	LD50 Dermal	Rabbit	>3 g/kg	-
1,2,4-trimethylbenzene	LD50 Oral	Rat	>15400 mg/kg	-
	LC50 Inhalation Vapor	Rat	18000 mg/m³	4 hours
barium sulfate	LD50 Oral	Rat	5 g/kg	-
IRGAZIN DPP ORANGE 16A	LD50 Oral	Rat	>5000 mg/kg	-
	LD50 Dermal	Rabbit	>2 g/kg	-
	LD50 Dermal	Rat	>2000 mg/kg	-
aluminium hydroxide	LD50 Oral	Rat	>2 g/kg	-
1,2,4,5-tetramethylbenzene	LD50 Oral	Rat	>5000 mg/kg	-
toluene	LD50 Oral	Rat	6700 mg/kg	-
	LC50 Inhalation Vapor	Rat	49 g/m³	4 hours
	LD50 Dermal	Rabbit	8.39 g/kg	-
Naphtha (petroleum), hydrotreated heavy	LD50 Oral	Rat	5580 mg/kg	-
	LD50 Oral	Rat	>6 g/kg	-
Solvent naphtha (petroleum), heavy arom.	LD50 Oral	Rat	3.2 g/kg	-
naphthalene	LD50 Dermal	Rabbit	>20 g/kg	-
	LD50 Oral	Rat	490 mg/kg	-
neodecanoic acid, cobalt salt	LD50 Oral	Rat - Female	1098 mg/kg	-
cumene	LC50 Inhalation Vapor	Rat	39000 mg/m³	4 hours
	LD50 Dermal	Rabbit	12.3 g/kg	-
	LD50 Oral	Rat	1400 mg/kg	-

Conclusion/Summary : There are no data available on the mixture itself.

Irritation/Corrosion

Section 11. Toxicological information

Product/ingredient name	Result	Species	Score	Exposure	Observation
xylene	Skin - Moderate irritant	Rabbit	-	24 hours 500 mg	-
2-butoxyethanol	Skin - Moderate irritant Eyes - Irritant	Rabbit Rabbit	- -	4 hours 24 hours	28 days 21 days

Conclusion/Summary

Skin : There are no data available on the mixture itself.

Eyes : There are no data available on the mixture itself.

Respiratory : There are no data available on the mixture itself.

Sensitization

Product/ingredient name	Route of exposure	Species	Result
neodecanoic acid, cobalt salt	skin	Mouse	Sensitizing

Conclusion/Summary

Skin : There are no data available on the mixture itself.

Respiratory : There are no data available on the mixture itself.

Mutagenicity

Conclusion/Summary : There are no data available on the mixture itself.

Carcinogenicity

Conclusion/Summary : There are no data available on the mixture itself.

Classification

Product/ingredient name	OSHA	IARC	NTP
xylene	-	3	-
diiron trioxide	-	3	-
titanium dioxide	-	2B	-
ethylbenzene	-	2B	-
2-butoxyethanol	-	3	-
carbon black, respirable powder	-	2B	-
toluene	-	3	-
Fatty acids, C9-13-neo-, cobalt salts	-	2B	Reasonably anticipated to be a human carcinogen.
naphthalene	-	2B	Reasonably anticipated to be a human carcinogen.
neodecanoic acid, cobalt salt	-	2B	Reasonably anticipated to be a human carcinogen.
cumene	-	2B	Reasonably anticipated to be a human carcinogen.

Carcinogen Classification code:

IARC: 1, 2A, 2B, 3, 4
NTP: Known to be a human carcinogen; Reasonably anticipated to be a human carcinogen
OSHA: +
Not listed/not regulated: -

Reproductive toxicity

Conclusion/Summary : There are no data available on the mixture itself.

Teratogenicity

Conclusion/Summary : There are no data available on the mixture itself.

Section 11. Toxicological information

Specific target organ toxicity (single exposure)

Name	Category
xylene	Category 3
n-butyl acetate	Category 3
acetone	Category 3
butanone	Category 3
heptan-2-one	Category 3
Solvent naphtha (petroleum), light aromatic	Category 3
1,2,4-trimethylbenzene	Category 3
1,2,4,5-tetramethylbenzene	Category 3
toluene	Category 3
Naphtha (petroleum), hydrotreated heavy	Category 3
Solvent naphtha (petroleum), heavy arom.	Category 3
Fatty acids, C9-13-neo-, cobalt salts	Category 3
cumene	Category 3

Specific target organ toxicity (repeated exposure)

Name	Category
ethylbenzene	Category 2
toluene	Category 2
naphthalene	Category 2
cumene	Category 2

Target organs : Contains material which causes damage to the following organs: brain, central nervous system (CNS), eye, lens or cornea.
Contains material which may cause damage to the following organs: blood, kidneys, lungs, the nervous system, the reproductive system, liver, heart, spleen, lymphatic system, peripheral nervous system, gastrointestinal tract, upper respiratory tract, skin, bone marrow, ears.

Aspiration hazard

Name	Result
xylene	ASPIRATION HAZARD - Category 1
ethylbenzene	ASPIRATION HAZARD - Category 1
Solvent naphtha (petroleum), light aromatic	ASPIRATION HAZARD - Category 1
toluene	ASPIRATION HAZARD - Category 1
Naphtha (petroleum), hydrotreated heavy	ASPIRATION HAZARD - Category 1
Solvent naphtha (petroleum), heavy arom.	ASPIRATION HAZARD - Category 1
cumene	ASPIRATION HAZARD - Category 1

Information on the likely routes of exposure

Potential acute health effects

Eye contact : Causes serious eye irritation.

Inhalation : Harmful if inhaled. Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness. May cause respiratory irritation. May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Skin contact : Causes skin irritation. Defatting to the skin. May cause an allergic skin reaction.

Ingestion : Can cause central nervous system (CNS) depression.

Over-exposure signs/symptoms

Section 11. Toxicological information

Eye contact : Adverse symptoms may include the following:
pain or irritation
watering
redness

Inhalation : Adverse symptoms may include the following:
respiratory tract irritation
coughing
wheezing and breathing difficulties
asthma
nausea or vomiting
headache
drowsiness/fatigue
dizziness/vertigo
unconsciousness
reduced fetal weight
increase in fetal deaths
skeletal malformations

Skin contact : Adverse symptoms may include the following:
irritation
redness
dryness
cracking
reduced fetal weight
increase in fetal deaths
skeletal malformations

Ingestion : Adverse symptoms may include the following:
reduced fetal weight
increase in fetal deaths
skeletal malformations

Delayed and immediate effects and also chronic effects from short and long term exposure

Conclusion/Summary : There are no data available on the mixture itself. This product contains TiO2 which has been classified as a GHS Carcinogen Category 2 based on its IARC 2B classification. For many PPG products, TiO2 is utilized as a raw material in a liquid coating formulation. In this case, the TiO2 particles are bound in a matrix with no meaningful potential for human exposure to unbound particles of TiO2 when the product is applied with a brush or roller. Sanding the coating surface or mist from spray applications may be harmful depending on the duration and level of exposure and require the use of appropriate personal protective equipment and/or engineering controls (see Section 8). Exposure to component solvent vapor concentrations in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness. Solvents may cause some of the above effects by absorption through the skin. There is some evidence that repeated exposure to organic solvent vapors in combination with constant loud noise can cause greater hearing loss than expected from exposure to noise alone. If splashed in the eyes, the liquid may cause irritation and reversible damage. Ingestion may cause nausea, diarrhea and vomiting. This takes into account, where known, delayed and immediate effects and also chronic effects of components from short-term and long-term exposure by oral, inhalation and dermal routes of exposure and eye contact.

Short term exposure

Section 11. Toxicological information

Potential immediate effects : There are no data available on the mixture itself.

Potential delayed effects : There are no data available on the mixture itself.

Long term exposure

Potential immediate effects : There are no data available on the mixture itself.

Potential delayed effects : There are no data available on the mixture itself.

Potential chronic health effects

General : May cause damage to organs through prolonged or repeated exposure. Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis. Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.

Carcinogenicity : May cause cancer. Risk of cancer depends on duration and level of exposure.

Mutagenicity : No known significant effects or critical hazards.

Teratogenicity : Suspected of damaging the unborn child.

Developmental effects : No known significant effects or critical hazards.

Fertility effects : Suspected of damaging fertility.

Numerical measures of toxicity

Acute toxicity estimates

Route	ATE value
Oral	6623.7 mg/kg
Dermal	3919.6 mg/kg
Inhalation (gases)	11738.1 ppm
Inhalation (vapors)	26.15 mg/l
Inhalation (dusts and mists)	3.348 mg/l

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
2-methoxy-1-methylethyl acetate	Acute LC50 161 mg/l Fresh water	Fish	96 hours
diiron trioxide	Acute EC50 >100 mg/l	Daphnia	48 hours
titanium dioxide	Acute LC50 >100 mg/l Fresh water	Daphnia - Daphnia magna	48 hours
heptan-2-one	Acute LC50 131 mg/l	Fish	96 hours
ethylbenzene	Acute LC50 150 to 200 mg/l Fresh water	Fish - Lepomis macrochirus - Young of the year	96 hours
2-butoxyethanol	Acute LC50 1474 mg/l	Fish	96 hours
	Chronic NOEC >100 mg/l	Fish	21 days
Solvent naphtha (petroleum), heavy arom.	NOEL 0.48 mg/l Fresh water	Daphnia	21 days

Persistence and degradability

Section 12. Ecological information

Product/ingredient name	Test	Result	Dose	Inoculum
heptan-2-one	OECD 310	69 % - Readily - 28 days	-	-

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
xylene	-	-	Readily
acetone	-	-	Readily
heptan-2-one	-	-	Readily
ethylbenzene	-	-	Readily
2-butoxyethanol	-	-	Readily
toluene	-	-	Readily

Bioaccumulative potential

Product/ingredient name	$LogP_{ow}$	BCF	Potential
xylene	3.16	7.4 to 18.5	low
2-methoxy-1-methylethyl acetate	0.56	-	low
n-butyl acetate	1.78	-	low
acetone	-0.24	3	low
butanone	0.29	-	low
heptan-2-one	1.98	-	low
ethylbenzene	3.15	79.43	low
2-butoxyethanol	0.81	-	low
1,2,4-trimethylbenzene	3.63	120.23	low
1,2,4,5-tetramethylbenzene	4	-	high
toluene	2.73	8.32	low
naphthalene	3.3	85.11	low
cumene	3.66	35.48	low

Mobility in soil

Soil/water partition coefficient (K_{OC}) : Not available.

Section 13. Disposal considerations

Disposal methods : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 13. Disposal considerations

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees. Section 6. Accidental release measures

14. Transport information

	DOT	IMDG	IATA
UN number	UN1263	UN1263	UN1263
UN proper shipping name	PAINT	PAINT	PAINT
Transport hazard class (es)	3	3	3
Packing group	II	II	II
Environmental hazards	No.	No.	No.
Marine pollutant substances	Not applicable.	Not applicable.	Not applicable.
Product RQ (lbs)	234.61	Not applicable.	Not applicable.
RQ substances	(xylene, ethylbenzene)	Not applicable.	Not applicable.

Additional information

DOT : Package sizes shipped in quantities less than the product reportable quantity are not subject to the RQ (reportable quantity) transportation requirements.

IMDG : None identified.

IATA : None identified.

Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Section 15. Regulatory information

United States

United States inventory (TSCA 8b) : All components are listed or exempted.

United States - TSCA 5(e) - Substances consent order:

Iron(1+), chloro[dimethyl 9,9-dihydroxy-3-methyl-2,4-di(2-pyridinyl-κN)-7-[(2-pyridinyl-κN)methyl]-3,7-diazabicyclo[3.3.1]nonane-1,5-dicarboxylate-κN3,κN7]-, chloride (1:1), (OC-6-52)- — Listed

United States - TSCA 5(a)2 - Final significant new use rules:

Iron(1+), chloro[dimethyl 9,9-dihydroxy-3-methyl-2,4-di(2-pyridinyl-κN)-7-[(2-pyridinyl-κN)methyl]-3,7-diazabicyclo[3.3.1]nonane-1,5-dicarboxylate-κN3,κN7]-, chloride (1:1), (OC-6-52)- — Listed — P-10-0358

SARA 302/304

SARA 304 RQ : Not applicable.

Composition/information on ingredients

Section 15. Regulatory information

No products were found.

SARA 311/312

Classification : FLAMMABLE LIQUIDS - Category 2
ACUTE TOXICITY (inhalation) - Category 4
SKIN IRRITATION - Category 2
EYE IRRITATION - Category 2A
RESPIRATORY SENSITIZATION - Category 1
SKIN SENSITIZATION - Category 1
CARCINOGENICITY - Category 1B
TOXIC TO REPRODUCTION (Fertility) - Category 2
TOXIC TO REPRODUCTION (Unborn child) - Category 2
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) (hearing organs) - Category 2
HNOC - Defatting irritant

Composition/information on ingredients

Name	%	Classification
xylene	≥20 - ≤50	FLAMMABLE LIQUIDS - Category 3 ACUTE TOXICITY (dermal) - Category 4 ACUTE TOXICITY (inhalation) - Category 4 SKIN IRRITATION - Category 2 EYE IRRITATION - Category 2A SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3 ASPIRATION HAZARD - Category 1
n-butyl acetate	≥10 - ≤20	FLAMMABLE LIQUIDS - Category 2 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3 HNOC - Defatting irritant
titanium dioxide	≥10 - ≤20	CARCINOGENICITY - Category 2
acetone	≥10 - ≤20	FLAMMABLE LIQUIDS - Category 2 EYE IRRITATION - Category 2A SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3 HNOC - Defatting irritant
butanone	≥10 - ≤20	FLAMMABLE LIQUIDS - Category 2 EYE IRRITATION - Category 2A SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3 HNOC - Defatting irritant
heptan-2-one	≥5.0 - ≤10	FLAMMABLE LIQUIDS - Category 3 ACUTE TOXICITY (oral) - Category 4 ACUTE TOXICITY (inhalation) - Category 4 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3 HNOC - Defatting irritant
ethylbenzene	≥5.0 - ≤9.9	FLAMMABLE LIQUIDS - Category 2

Section 15. Regulatory information

Solvent naphtha (petroleum), light aromatic	≥5.0 - ≤10	ACUTE TOXICITY (inhalation) - Category 4 CARCINOGENICITY - Category 2 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) (hearing organs) - Category 2 ASPIRATION HAZARD - Category 1 HNOC - Defatting irritant FLAMMABLE LIQUIDS - Category 3 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3 ASPIRATION HAZARD - Category 1
2-butoxyethanol	≥5.0 - ≤7.3	HNOC - Defatting irritant FLAMMABLE LIQUIDS - Category 4 ACUTE TOXICITY (oral) - Category 4 ACUTE TOXICITY (dermal) - Category 4 ACUTE TOXICITY (inhalation) - Category 4 SKIN IRRITATION - Category 2 EYE IRRITATION - Category 2A
carbon black, respirable powder	≥1.0 - ≤5.0	COMBUSTIBLE DUSTS CARCINOGENICITY - Category 2
1,2,4-trimethylbenzene	≥1.0 - ≤4.4	FLAMMABLE LIQUIDS - Category 3 ACUTE TOXICITY (inhalation) - Category 4 SKIN IRRITATION - Category 2 EYE IRRITATION - Category 2A SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3 HNOC - Defatting irritant
1,2,4,5-tetramethylbenzene	≥1.0 - ≤5.0	COMBUSTIBLE DUSTS EYE IRRITATION - Category 2A SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3
toluene	≥1.0 - ≤5.0	FLAMMABLE LIQUIDS - Category 2 SKIN IRRITATION - Category 2 TOXIC TO REPRODUCTION (Unborn child) - Category 2 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2 ASPIRATION HAZARD - Category 1 HNOC - Defatting irritant
Naphtha (petroleum), hydrotreated heavy	≥1.0 - ≤5.0	FLAMMABLE LIQUIDS - Category 4 EYE IRRITATION - Category 2A SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3 ASPIRATION HAZARD - Category 1 HNOC - Defatting irritant
Solvent naphtha (petroleum), heavy arom.	≥1.0 - ≤4.8	FLAMMABLE LIQUIDS - Category 4 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3 ASPIRATION HAZARD - Category 1 HNOC - Defatting irritant
zinc sulphide	≥1.0 - ≤5.0	EYE IRRITATION - Category 2A

Section 15. Regulatory information

Fatty acids, C9-13-neo-, cobalt salts	<1.0	SKIN SENSITIZATION - Category 1B ACUTE TOXICITY (oral) - Category 4 SKIN IRRITATION - Category 2 EYE IRRITATION - Category 2A RESPIRATORY SENSITIZATION - Category 1A SKIN SENSITIZATION - Category 1B CARCINOGENICITY - Category 1B TOXIC TO REPRODUCTION (Fertility) - Category 2 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3
naphthalene	<1.0	FLAMMABLE SOLIDS - Category 2 ACUTE TOXICITY (oral) - Category 4 CARCINOGENICITY - Category 1B SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2
neodecanoic acid, cobalt salt	<1.0	ACUTE TOXICITY (oral) - Category 4 SKIN IRRITATION - Category 2 SKIN SENSITIZATION - Category 1B CARCINOGENICITY - Category 1B TOXIC TO REPRODUCTION (Fertility) - Category 2
cumene	<1.0	FLAMMABLE LIQUIDS - Category 3 ACUTE TOXICITY (oral) - Category 4 CARCINOGENICITY - Category 1B SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2 ASPIRATION HAZARD - Category 1 HNOC - Defatting irritant

SARA 313

Supplier notification :

Chemical name	CAS number	Concentration
xylene	1330-20-7	30 - 60
ethylbenzene	100-41-4	5 - 10
2-butoxyethanol	111-76-2	3 - 7
Aluminium powder (stabilized)	7429-90-5	1 - 5
1,2,4-trimethylbenzene	95-63-6	1 - 5
toluene	108-88-3	1 - 5
zinc sulphide	1314-98-3	0.5 - 1.5
Fatty acids, C9-13-neo-, cobalt salts	68955-83-9	0.1 - 1
naphthalene	91-20-3	0.1 - 1
neodecanoic acid, cobalt salt	27253-31-2	0.1 - 1

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

Additional environmental information is contained on the Environmental Data Sheet for this product, which can be obtained from your PPG representative.

California Prop. 65

⚠ **WARNING**: Cancer and Reproductive Harm - www.P65Warnings.ca.gov.

Section 16. Other information

Hazardous Material Information System (U.S.A.)

Health : 2 * **Flammability** : 3 **Physical hazards** : 0
(*) - Chronic effects

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings and the associated label are not required on MSDSs or products leaving a facility under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered trademark and service mark of the American Coatings Association, Inc.

The customer is responsible for determining the PPE code for this material. For more information on HMIS® Personal Protective Equipment (PPE) codes, consult the HMIS® Implementation Manual.

National Fire Protection Association (U.S.A.)

Health : 2 **Flammability** : 3 **Instability** : 0

Date of previous issue : **1/14/2019**

Organization that prepared the MSDS : EHS

Key to abbreviations : ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
UN = United Nations

◤ **Indicates information that has changed from previously issued version.**

Disclaimer

The information contained in this data sheet is based on present scientific and technical knowledge. The purpose of this information is to draw attention to the health and safety aspects concerning the products supplied by PPG, and to recommend precautionary measures for the storage and handling of the products. No warranty or guarantee is given in respect of the properties of the products. No liability can be accepted for any failure to observe the precautionary measures described in this data sheet or for any misuse of the products.

(/)

RUST-OLEUM

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HOME (/)/ PRODUCTS (/PRODUCTS)/ STOPS RUST® PROTECTIVE ENAMEL SPRAY PAINT

SPRAY PAINT

Stops Rust® Protective Enamel Spray Paint

PRODUCT OVERVIEW

SDS/TDS TECHNICAL INFO

ABOUT STOPS RUST® PROTECTIVE ENAMEL SPRAY PAINT

Don't settle for anything less than the #1 rust-preventative paint on the market. Nothing protects your projects like Rust-Oleum® Stops Rust® Protective Enamel. With nearly 50 popular colors in three finishes, it's never been easier to refinish, refresh and relax!

- Indoor/outdoor
- Gloss, semi-gloss or flat finish
- Durable, corrosion-resistant

FOR BEST RESULTS

For heavily rusted surfaces, apply Rust-Oleum® Stops Rust Rusty Metal Primer.

AVAILABLE SIZES

12 oz. Spray

Gloss Black
7779830 - 12 oz. Spray

Collapse All

12 oz. Spray :

Blacks (3)

Blues (8)

Browns (11)

Grays (4).

Greens (7)

Under Barcode.
200667798

FIND A PRODUCT (HTTPS://WWW.HOMEDEPO

Featured Video

How To Video | Bring New Life to a Metal Chair with Stops Rust

Linda Clark

From: Fran Bailey [fran.bailey@infotrac.net]
Sent: Tuesday, October 29, 2019 10:20 AM
To: dbtrucking@scrtc.com
Subject: for SDS request

Good Morning,

Please submit the UPC or Product code(s) back to me.

Thank you,

Francenia Bailey
Customer Service Supervisor
fran.bailey@infotrac.net

Infotrac
200 N. Palmetto St.
Leesburg, FL 34748
Phone: 1-352-323-3500
Fax: 1-352-323-1991

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Safety Data Sheet

RUST-OLEUM CORPORATION
* Trusted Quality Since 1921 *
www.rustoleum.com

1. Identification

Product Name:	STRUST +SSPR 6PK GLOSS BLACK	**Revision Date:**	5/9/2017
Product Identifier:	7779830	**Supercedes Date:**	9/20/2016
Product Use/Class:	Topcoat/Aerosols		
Supplier:	Rust-Oleum Corporation 11 Hawthorn Parkway Vernon Hills, IL 60061 USA	**Manufacturer:**	Rust-Oleum Corporation 11 Hawthorn Parkway Vernon Hills, IL 60061 USA
Preparer:	Regulatory Department		
Emergency Telephone:	24 Hour Hotline: 847-367-7700		

2. Hazard Identification

Classification

Symbol(s) of Product

Signal Word
Danger

Possible Hazards
34% of the mixture consists of ingredient(s) of unknown acute toxicity.

GHS HAZARD STATEMENTS

Carcinogenicity, category 1B	H350	May cause cancer.
Compressed Gas	H280	Contains gas under pressure; may explode if heated.
Eye Irritation, category 2	H319	Causes serious eye irritation.
Flammable Aerosol, category 1	H222	Extremely flammable aerosol.
Germ Cell Mutagenicity, category 1B	H340	May cause genetic defects.
STOT, repeated exposure, category 2	H373	May cause damage to organs through prolonged or repeated exposure.
STOT, single exposure, category 3, NE	H336	May cause drowsiness or dizziness.

GHS LABEL PRECAUTIONARY STATEMENTS

P201	Obtain special instructions before use.
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P211	Do not spray on an open flame or other ignition source.
P251	Do not pierce or burn, even after use.
P260	Do not breathe dust/fume/gas/mist/vapors/spray.
P264	Wash hands thoroughly after handling.
P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308+P313	IF exposed or concerned: Get medical advice/attention.
P312	Call a POISON CENTER or doctor/physician if you feel unwell.
P337+P313	If eye irritation persists: Get medical advice/attention.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up.
P410+P403	Protect from sunlight. Store in a well-ventilated place.
P410+P412	Protect from sunlight. Do no expose to temperatures exceeding 50°C/ 122°F.
P501	Dispose of contents/container in accordance with local, regional and national regulations.

3. Composition/Information On Ingredients

HAZARDOUS SUBSTANCES

Chemical Name	CAS-No.	Wt.% Range	GHS Symbols	GHS Statements
Acetone	67-64-1	25-50	GHS02-GHS07	H225-319-332-336
Propane	74-98-6	10-25	GHS04	H280
n-Butane	106-97-8	2.5-10	GHS04	H280
n-Butyl Acetate	123-86-4	2.5-10	GHS02-GHS07	H226-336
Barium Sulfate	7727-43-7	2.5-10	Not Available	Not Available
Xylenes (o-, m-, p- isomers)	1330-20-7	2.5-10	GHS02-GHS07	H226-315-319-332
Dimethyl Carbonate	616-38-6	2.5-10	GHS02	H225
Naphtha, Petroleum, Hydrotreated Light	64742-49-0	2.5-10	GHS08	H304
Carbon Black	1333-86-4	1.0-2.5	Not Available	Not Available
Propylene Glycol Monobutyl Ether	5131-66-8	1.0-2.5	GHS07	H302-315-319
Ethylbenzene	100-41-4	1.0-2.5	GHS02-GHS07-GHS08	H225-304-332-351-373
Naphtha, Hydrotreated Heavy	64742-48-9	0.1-1.0	GHS08	H304-340-350

4. First-aid Measures

FIRST AID - EYE CONTACT: Immediately flush eyes with plenty of water for at least 15 minutes holding eyelids open. Get medical attention. Do NOT allow rubbing of eyes or keeping eyes closed.

FIRST AID - SKIN CONTACT: Wash skin with soap and water. Remove contaminated clothing. Get medical attention if irritation develops or persists.

FIRST AID - INHALATION: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get immediate medical attention. Do NOT use mouth-to-mouth resuscitation. If you experience difficulty in breathing, leave the area to obtain fresh air. If continued difficulty is experienced, get medical assistance immediately.

FIRST AID - INGESTION: Aspiration hazard: Do not induce vomiting or give anything by mouth because this material can enter the lungs and cause severe lung damage. Get immediate medical attention. If swallowed, get medical attention.

5. Fire-fighting Measures

EXTINGUISHING MEDIA: Alcohol Film Forming Foam, Carbon Dioxide, Dry Chemical, Dry Sand, Water Fog

UNUSUAL FIRE AND EXPLOSION HAZARDS: FLASH POINT IS LESS THAN 20°F. EXTREMELY FLAMMABLE LIQUID AND VAPOR!Water spray may be ineffective. Closed containers may explode when exposed to extreme heat due to buildup of steam. Closed containers may explode when exposed to extreme heat. Vapors may form explosive mixtures with air. Vapors can travel to a source of ignition and flash back. Keep containers tightly closed. Isolate from heat, electrical equipment, sparks and open flame. Perforation of the pressurized container may cause bursting of the can. No unusual fire or explosion hazards noted.

SPECIAL FIREFIGHTING PROCEDURES: Water may be used to cool closed containers to prevent pressure buildup and possible autoignition or explosion. Full protective equipment including self-contained breathing apparatus should be used. Evacuate area and fight fire from a safe distance. Use water spray to keep fire-exposed containers cool. Containers may explode when heated.

6. Accidental Release Measures

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED: Contain spilled liquid with sand or earth. DO NOT use combustible materials such as sawdust. Isolate the hazard area and deny entry to unnecessary and unprotected personnel. Remove all sources of ignition, ventilate area and remove with inert absorbent and non-sparking tools. Dispose of according to local, state (provincial) and federal regulations. Do not incinerate closed containers. Ventilate area, isolate spilled material, and remove with inert absorbent. Dispose of contaminated absorbent, container, and unused contents in accordance with local, state, and federal regulations.

7. Handling and Storage

HANDLING: Wash thoroughly after handling. Wash hands before eating. Remove contaminated clothing and launder before reuse. Use only in a well-ventilated area. Use only with adequate ventilation. Follow all MSDS/label precautions even after container is emptied because it may retain product residues. Avoid breathing fumes, vapors, or mist. Avoid contact with eyes, skin and clothing.

STORAGE: Store in a dry, well ventilated place. Keep container tightly closed when not in use. Keep containers tightly closed. Isolate from heat, electrical equipment, sparks and open flame. Contents under pressure. Do not store above 120 ° F. Store large quantities in buildings designed and protected for storage of flammable aerosols. Keep away from heat, sparks, flame and sources of ignition. Contents under pressure. Do not expose to heat or store above 120 ° F. Avoid excess heat. Product should be stored in tightly sealed containers and protected from heat, moisture, and foreign materials.

8. Exposure Controls/Personal Protection

Chemical Name	CAS-No.	Weight % Less Than	ACGIH TLV-TWA	ACGIH TLV-STEL	OSHA PEL-TWA	OSHA PEL-CEILING
Acetone	67-64-1	30.0	250 ppm	500 ppm	1000 ppm	N.E.
Propane	74-98-6	20.0	N.E.	N.E.	1000 ppm	N.E.
n-Butane	106-97-8	10.0	N.E.	1000 ppm	N.E.	N.E.
n-Butyl Acetate	123-86-4	10.0	50 ppm	150 ppm	150 ppm	N.E.
Barium Sulfate	7727-43-7	10.0	5 mg/m3	N.E.	15 mg/m3	N.E.
Xylenes (o-, m-, p- isomers)	1330-20-7	10.0	100 ppm	150 ppm	100 ppm	N.E.
Dimethyl Carbonate	616-38-6	5.0	N.E.	N.E.	N.E.	N.E.
Naphtha, Petroleum, Hydrotreated Light	64742-49-0	5.0	N.E.	N.E.	N.E.	N.E.
Carbon Black	1333-86-4	5.0	3 mg/m3	N.E.	3.5 mg/m3	N.E.
Propylene Glycol Monobutyl Ether	5131-66-8	5.0	N.E.	N.E.	N.E.	N.E.
Ethylbenzene	100-41-4	5.0	20 ppm	N.E.	100 ppm	N.E.
Naphtha, Hydrotreated Heavy	64742-48-9	1.0	N.E.	N.E.	N.E.	N.E.

PERSONAL PROTECTION

ENGINEERING CONTROLS: Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Use explosion-proof ventilation equipment. Provide general dilution of local exhaust ventilation in volume and pattern to keep TLV of hazardous ingredients below acceptable limits. Prevent build-up of vapors by opening all doors and windows to achieve cross-ventilation.

RESPIRATORY PROTECTION: A respiratory protection program that meets OSHA 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use. A NIOSH/MSHA approved air purifying respirator with organic vapor cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits.

SKIN PROTECTION: Use gloves to prevent prolonged skin contact. Use impervious gloves to prevent skin contact and absorption of this material through the skin. Nitrile or Neoprene gloves may afford adequate skin protection.

EYE PROTECTION: Use safety eyewear designed to protect against splash of liquids.

OTHER PROTECTIVE EQUIPMENT: Refer to safety supervisor or industrial hygienist for further guidance regarding types of personal protective equipment and their applications. Refer to safety supervisor or industrial hygienist for further information regarding personal protective equipment and its application.

HYGIENIC PRACTICES: Wash thoroughly with soap and water before eating, drinking or smoking. Remove contaminated clothing immediately and launder before reuse.

9. Physical and Chemical Properties

Appearance:	Aerosolized Mist	**Physical State:**	Liquid
Odor:	Solvent Like	**Odor Threshold:**	N.E.
Relative Density:	0.777	**pH:**	N.A.
Freeze Point, °C:	N.D.	**Viscosity:**	N.D.
Solubility in Water:	Slight	**Partition Coefficient, n-octanol/ water:**	N.D.
Decompostion Temp., °C:	N.D.	**Explosive Limits, vol%:**	0.9 - 13.0
Boiling Range, °C:	-37 - 232	**Flash Point, °C:**	-96
Flammability:	Supports Combustion	**Auto-ignition Temp., °C:**	N.D.
Evaporation Rate:	Faster than Ether	**Vapor Pressure:**	N.D.
Vapor Density:	Heavier than Air		

(See "Other information" Section for abbreviation legend)

10. Stability and Reactivity

CONDITIONS TO AVOID: Avoid temperatures above 120°F (49°C). Avoid contact with strong acid and strong bases. Avoid all possible sources of ignition.

INCOMPATIBILITY: Incompatible with strong oxidizing agents, strong acids and strong alkalies.

HAZARDOUS DECOMPOSITION: By open flame, carbon monoxide and carbon dioxide. When heated to decomposition, it emits acrid smoke and irritating fumes. Contains solvents which may form carbon monoxide, carbon dioxide, and formaldehyde.

HAZARDOUS POLYMERIZATION: Will not occur under normal conditions.

STABILITY: This product is stable under normal storage conditions.

11. Toxicological information

EFFECTS OF OVEREXPOSURE - EYE CONTACT: Causes Serious Eye Irritation

EFFECTS OF OVEREXPOSURE - SKIN CONTACT: Substance may cause slight skin irritation. May cause skin irritation. Allergic reactions are possible. Prolonged or repeated contact may cause skin irritation.

EFFECTS OF OVEREXPOSURE - INHALATION: Harmful if inhaled. High gas, vapor, mist or dust concentrations may be harmful if inhaled. Avoid breathing fumes, spray, vapors, or mist. High vapor concentrations are irritating to the eyes, nose, throat and lungs. Prolonged or excessive inhalation may cause respiratory tract irritation.

EFFECTS OF OVEREXPOSURE - INGESTION: Harmful if swallowed. Aspiration hazard if swallowed; can enter lungs and cause damage.

EFFECTS OF OVEREXPOSURE - CHRONIC HAZARDS: May cause central nervous system disorder (e.g., narcosis involving a loss of coordination, weakness, fatigue, mental confusion, and blurred vision) and/or damage. High concentrations may lead to central nervous system effects (drowsiness, dizziness, nausea, headaches, paralysis, and blurred vision) and/or damage. Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage. Overexposure to xylene in laboratory animals has been associated with liver abnormalities, kidney, lung, spleen, eye and blood damage as well as reproductive disorders. Effects in humans, due to chronic overexposure, have included liver, cardiac abnormalities and nervous system damage. Contains carbon black. Chronic inflammation, lung fibrosis, and lung tumors have been observed in some rats experimentally exposed for long periods of time to excessive concentrations of carbon black and several insoluble fine dust particles. Tumors have not been observed in other animal species (i.e., mouse and hamster) under similar circumstances and study conditions. Epidemiological studies of North American workers show no evidence of clinically significant adverse health effects due to occupational exposure to carbon black.

Carbon black is listed as a Group 2B-"Possibly carcinogenic to humans" by IARC and is proposed to be listed as A4- "not classified as a human carcinogen" by the American Conference of Governmental Industrial Hygienists. Significant exposure is not anticipated during brush application or drying. Risk of overexposure depends on duration and level of exposure to dust from repeated sanding of surfaces or spray mist and the actual concentration of carbon black in the formula. IARC lists Ethylbenzene as a possible human carcinogen (group 2B).

PRIMARY ROUTE(S) OF ENTRY: Eye Contact, Ingestion, Inhalation, Skin Absorption, Skin Contact

ACUTE TOXICITY VALUES

The acute effects of this product have not been tested. Data on individual components are tabulated below:

CAS-No.	Chemical Name	Oral LD50	Dermal LD50	Vapor LC50
67-64-1	Acetone	5800 mg/kg Rat	>15700 mg/kg Rabbit	50.1 mg/L Rat
74-98-6	Propane	N.I.	N.I.	658 mg/L Rat

106-97-8	n-Butane	N.I.	N.I.	658 mg/L Rat
123-86-4	n-Butyl Acetate	10768 mg/kg Rat	>17600 mg/kg Rabbit	> 21 mg/L Rat
1330-20-7	Xylenes (o-, m-, p- isomers)	3500 mg/kg Rat	>4350 mg/kg Rabbit	29.08 mg/L Rat
616-38-6	Dimethyl Carbonate	13000 mg/kg Rat	>5000 mg/kg Rabbit	140 mg/L Rat
64742-49-0	Naphtha, Petroleum, Hydrotreated Light	>5000 mg/kg Rat	>3160 mg/kg Rabbit	>4951 mg/L Rat
1333-86-4	Carbon Black	>15400 mg/kg Rat	N.I.	N.I.
5131-66-8	Propylene Glycol Monobutyl Ether	1900 mg/kg Rat	N.I.	N.I.
100-41-4	Ethylbenzene	3500 mg/kg Rat	15400 mg/kg Rabbit	17.4 mg/L Rat
64742-48-9	Naphtha, Hydrotreated Heavy	>5000 mg/kg Rat	>3160 mg/kg Rabbit	N.I.

N.I. - No Information

12. Ecological Information

ECOLOGICAL INFORMATION: Product is a mixture of listed components. Product is a mixture of listed components.

13. Disposal Information

DISPOSAL INFORMATION: Dispose of material in accordance to local, state, and federal regulations and ordinances. Do not allow to enter waterways, wastewater, soil, storm drains or sewer systems.

14. Transport Information

	Domestic (USDOT)	International (IMDG)	Air (IATA)	TDG (Canada)
UN Number:	N.A.	1950	1950	N.A.
Proper Shipping Name:	Paint Products in Limited Quantities	Aerosols	Aerosols	Paint Products in Limited Quantities
Hazard Class:	N.A.	2.1	2.1	N.A.
Packing Group:	N.A.	N.A.	N.A.	N.A.
Limited Quantity:	Yes	Yes	Yes	Yes

15. Regulatory Information

U.S. Federal Regulations:

CERCLA - SARA Hazard Category

This product has been reviewed according to the EPA 'Hazard Categories' promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

Fire Hazard, Pressure Hazard, Acute Health Hazard, Chronic Health Hazard

Sara Section 313:

This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendment and Reauthorization Act of 1986 and 40 CFR part 372:

Chemical Name	CAS-No.
Xylenes (o-, m-, p- isomers)	1330-20-7
Dimethyl Carbonate	616-38-6
Ethylbenzene	100-41-4

Toxic Substances Control Act:

This product contains the following chemical substances subject to the reporting requirements of TSCA 12(b) if exported from the United States:

No TSCA 12(b) components exist in this product.

16. Other Information

HMIS RATINGS

Health:	2*	**Flammability:**	4	**Physical Hazard:**	0	**Personal Protection:**	X

NFPA RATINGS

Health:	2	**Flammability:**	4	**Instability**	0

VOLATILE ORGANIC COMPOUNDS, g/L: 530

SDS REVISION DATE: 5/9/2017

REASON FOR REVISION:
Regulatory Formula Source Changed
Product Composition Changed
Substance and/or Product Properties Changed in Section(s):
02 - Hazard Identification
09 - Physical & Chemical Properties
16 - Other Information
Statement(s) Changed

Legend: N.A. - Not Applicable, N.E. - Not Established, N.D. - Not Determined

Rust-Oleum Corporation believes, to the best of its knowledge, information and belief, the information contained herein to be accurate and reliable as of the date of this safety data sheet. However, because the conditions of handling, use, and storage of these materials are beyond our control, we assume no responsibility or liability for personal injury or property damage incurred by the use of these materials. Rust-Oleum Corporation makes no warranty, expressed or implied, regarding the accuracy or reliability of the data or results obtained from their use. All materials may present unknown hazards and should be used with caution. The information and recommendations in this material safety data sheet are offered for the users' consideration and examination. It is the responsibility of the user to determine the final suitability of this information and to comply with all applicable international, federal, state, and local laws and regulations.

COMPANY IDENTITY: Transchemical
PRODUCT IDENTITY: 6012

SDS DATE: 07/19/2019
ORIGINAL: 05/13/2015

SAFETY DATA SHEET

This Safety Data Sheet conforms to ANSI Z400.5, and to the format requirements of the Global Harmonizing System.
THIS SDS COMPLIES WITH 29 CFR 1910.1200 (HAZARD COMMUNICATION STANDARD)
IMPORTANT: Read this SDS before handling & disposing of this product.
Pass this information on to employees, customers, & users of this product.

SECTION 1. IDENTIFICATION OF THE SUBSTANCE OR MIXTURE AND OF THE SUPPLIER

PRODUCT IDENTITY: 6012
SYNONYMS: None
PRODUCT USES: Lacquer Thinner

COMPANY IDENTITY: Transchemical
COMPANY ADDRESS: 419 E Desoto
COMPANY CITY: St.Louis, MO 63147
COMPANY PHONE: 1-314-231-6905
EMERGENCY PHONES: CHEMTREC: 1-800-424-9300 (USA)
CANUTEC: 1-613-996-6666 (CANADA)

SECTION 2. HAZARDS IDENTIFICATION

DANGER!!

2.1 HAZARD STATEMENTS: (CAT = Hazard Category)
(H200s) PHYSICAL: Flammable Liquids(CAT:2)
H225 HIGHLY FLAMMABLE LIQUID AND VAPOR.
(H300s) HEALTH: Acute Toxicity, Oral(CAT:3)
H301 TOXIC IF SWALLOWED.
(H300s) HEALTH: Aspiration Hazard(CAT:1)
H304 MAY BE FATAL IF SWALLOWED AND ENTERS AIRWAYS.
(H300s) HEALTH: Acute Toxicity, Dermal(CAT:3)
H311 TOXIC IN CONTACT WITH SKIN.
(H300s) HEALTH: Skin Corrosion/Irritation(CAT:2)
H315 CAUSES SKIN IRRITATION.
(H300s) HEALTH: Serious Eye Damage/Eye Irritation(CAT:1)
H318 CAUSES SERIOUS EYE DAMAGE.
(H300s) HEALTH: Acute Toxicity, Inhalation(CAT:3)
H331 TOXIC IF INHALED.
(H300s) HEALTH: Target Organ Toxicity, Single Exposure(CAT:3)
H335 MAY CAUSE RESPIRATORY IRRITATION.
(H300s) HEALTH: Target Organ Toxicity, Single Exposure; Narcotic Effects(CAT:3)
H336 MAY CAUSE DROWSINESS OR DIZZINESS.
(H300s) HEALTH: Target Organ Toxicity, Single Exposure(CAT:1)
H370 CAUSES DAMAGE TO ORGANS. (See Section 11 for Target Organ Information)
(H300s) HEALTH, Reproductive Toxicity(CAT:2)
H361 SUSPECTED OF DAMAGING FERTILITY OR THE UNBORN CHILD.
(H400s) ENVIRONMENT: Hazardous to Aquatic Environment, Acute(CAT:3)
H402 HARMFUL TO AQUATIC LIFE.

SECTION 2. HAZARDS IDENTIFICATION (CONTINUED)

2.2 PRECAUTIONARY STATEMENTS:
EXPOSURE PREVENTION: STRICT HYGIENE!
AVOID EXPOSURE OF (PREGNANT) WOMEN, ADOLESCENTS, CHILDREN!
P100s = General, P200s = Prevention, P300s = Response, P400s = Storage, P500s = Disposal

P202	Do not handle until all safety precautions have been read and understood.
P210	Keep away from heat, hot surfaces, sparks, open flames, and other ignition sources. No smoking.
P233	Keep container tightly closed.
P240	Ground/bond container and receiving equipment.
P241	Use explosion-proof electrical/ventilating/lighting equipment.
P242	Use only non-sparking tools.
P243	Take precautionary measures against static discharge.
P260	Do not breathe dust/fume/gas/mist/vapors/spray.
P264	Wash with soap & water thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P271	Use only outdoors or in a well-ventilated area.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P301+310	IF SWALLOWED: Immediately call a POISON CENTER/doctor/physician.
P304+340	IF INHALED: Remove victim to fresh air & keep at rest in a position comfortable for breathing.
P305+351+338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present & easy to do - Continue rinsing.
P330	Rinse mouth.
P332+313	If skin irritation occurs: Get medical advice/attention.
P361	Take off immediately all contaminated clothing.
P403+233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up.
P500	Dispose of contents/container following local/regional/federal regulations.

SEE SECTIONS 8, 11 & 12 FOR TOXICOLOGICAL INFORMATION.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

MATERIAL	CAS#	EINECS#	WT %
Methanol	67-56-1	200-659-6	40-50
Toluene	108-88-3	203-625-9	25-35
Acetone	67-64-1	200-662-2	5-15
Heptane	142-82-5	205-563-8	0-10

The specific chemical component identities and/or the exact component percentages of this material may be withheld as trade secrets. This information is made available to health professionals, employees, and designated representatives in accordance with the applicable provisions of 29 CFR 1910.1200 (I)(1).

TRACE COMPONENTS: Trace ingredients (if any) are present in < 1% concentration, (< 0.1% for potential carcinogens, reproductive toxins, respiratory tract mutagens, and sensitizers). None of the trace ingredients contribute significant additional hazards at the concentrations that may be present in this product. All pertinent hazard information has been provided in this document, per the requirements of the Federal Occupational Safety and Health Administration Standard (29 CFR 1910.1200), U.S. State equivalents, and Canadian Hazardous Materials Identification System Standard (CPR 4).

SECTION 4. FIRST AID MEASURES

4.1 MOST IMPORTANT SYMPTOMS/EFFECTS, ACUTE & CHRONIC:
See Section 11 for symptoms/effects, acute & chronic.

4.2 GENERAL ADVICE:
First Aid responders should pay attention to self-protection and use the recommended protective clothing (chemical resistant gloves, splash protection). If potential for exposure exists, refer to Section 8 for specific personal protective equipment.

4.3 EYE CONTACT:
If this product enters the eyes, check for and remove any contact lenses. Open eyes while under gently running water. Use sufficient force to open eyelids. "Roll" eyes to expose more surface. Minimum flushing is for 15 minutes. Seek immediate medical attention.

SECTION 4. FIRST AID MEASURES (CONTINUED)

4.4 SKIN CONTACT:
If the product contaminates the skin, immediately begin decontamination with running water. Minimum flushing is for 15 minutes. Remove contaminated clothing, taking care not to contaminate eyes. If skin becomes irritated and irritation persists, medical attention may be necessary. Wash contaminated clothing before reuse, discard contaminated shoes.

4.5 INHALATION:
After high vapor exposure, remove to fresh air. If breathing is difficult, give oxygen. If breathing has stopped, trained personnel should immediately begin artificial respiration. If the heart has stopped, trained personnel should immediately begin cardiopulmonary resuscitation (CPR). Seek immediate medical attention.

4.6 SWALLOWING:
Do not induce vomiting. GET MEDICAL ATTENTION IMMEDIATELY. If person is fully conscious give 1 cup or 8 ounces of water. If medical advice is delayed and if an adult has swallowed several ounces of chemical, then give 3-4 ounces (1/3-1/2 cup) (90-120 ml) of hard liquor such as 80 proof whiskey. For children, give proportionally less liquor at a dose of 0.3 ounce (1 1/2 tsp) (8 ml) liquor for each 10 pounds of body weight, or 2 ml per kg body weight (for example: 1.2 ounce (2 1/3 tablespoon) for a 40 pound child or 36 ml for an 18 kg child).

4.7 RESCUERS: Victims of chemical exposure must be taken for medical attention. Rescuers should be taken for medical attention, if necessary. Take a copy of label and SDS to physician or health professional with victim.

4.8 NOTES TO PHYSICIAN:
In cases where several ounces (60 - 100 ml) have been ingested, consider the use of ethanol and hemodialysis in the treatment. Consult standard literature for details of treatment. If ethanol is used, a therapeutically effective blood concentration in the range of 100 - 150 mg/dl may be achieved by a rapid loading dose followed by a continuous intravenous infusion. Consult standard literature for details of treatment. 4-Methyl pyrazole (Antizol TM) is an effective blocker of alcohol dehydrogenase and should be used in the treatment of ethylene glycol, di- or triethylene glycol, ethylene glycol butyl ether, or methanol intoxication if available. Fomepizol protocol (Brent, J. et al, New England Journal of Medicine, Feb 8, 2001, 344:6, p. 424-9): loading dose 15 mg/kg intravenously, follow by bolus dose of 10 mg/kg every 12 hours; after 48 hours, increase bolus dose to 15 mg/kg every 12 hours. Continue fomepizol until serum methanol, EG, DEG, or TEG are undetectable. The signs and symptoms of poisoning include anion gap metabolic acidosis, CNS depression, renal tubular injury, and possible late stage cranial nerve involvement. Respiratory symptoms, including pulmonary edema, may be delayed. Persons receiving significant exposure should be observed 24-48 hours for signs of respiratory distress. Maintain adequate ventilation and oxygenation of the patient. In severe poisoning, respiratory support with mechanical ventilation and positive end expiratory pressure may be required. Chemical eye burns may require extended irrigation. Obtain prompt consultation, preferably from an ophthalmologist. If lavage is performed, suggest endotracheal and/or esophageal control. Danger from lung aspiration must be weighted against toxicity when considering emptying the stomach. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

SECTION 5. FIRE FIGHTING MEASURES

5.1 FIRE & EXPLOSION PREVENTIVE MEASURES:
NO open flames, NO sparks, & NO smoking. Use a closed system, ventilation, explosion-proof electrical equipment, lighting.
Do NOT use compressed air for filling, discharging, or handling.

5.2 SUITABLE (& UNSUITABLE) EXTINGUISHING MEDIA:
Use dry powder, AFFF, alcohol-resistant foam, water in large amounts, carbon dioxide.

5.3 SPECIAL PROTECTIVE EQUIPMENT & PRECAUTIONS FOR FIRE FIGHTERS:
Water spray may be ineffective on fire but can protect fire-fighters & cool closed containers. Use fog nozzles if water is used.
Do not enter confined fire-space without full bunker gear.
(Helmet with face shield, bunker coats, gloves & rubber boots).

SECTION 5. FIRE FIGHTING MEASURES (CONTINUED)

5.4 SPECIFIC HAZARDS OF CHEMICAL & HAZARDOUS COMBUSTION PRODUCTS:
HIGHLY FLAMMABLE!! VAPORS CAN CAUSE FLASH FIRE
Isolate from oxidizers, heat, sparks, electric equipment & open flame. Closed containers may explode if exposed to extreme heat. Applying to hot surfaces requires special precautions. Empty container very hazardous! Continue all label precautions!

SECTION 6. ACCIDENTAL RELEASE MEASURES

6.1 SPILL AND LEAK RESPONSE AND ENVIRONMENTAL PRECAUTIONS:
Uncontrolled releases should be responded to by trained personnel using pre-planned procedures. No action shall be taken involving personal risk without suitable training. Keep unnecessary and unprotected personnel from entering spill area. Do not touch or walk through material. Avoid breathing vapor or mist. Provide adequate ventilation. Proper protective equipment should be used. In case of a spill, clear the affected area, protect people, and respond with trained personnel. ELIMINATE all ignition sources (no smoking, flares, sparks, or flames in immediate area).

6.2 PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT, EMERGENCY PROCEDURES:
The proper personal protective equipment for incidental releases (such as: 1 Liter of the product released in a well-ventilated area), use impermeable gloves, they should be Level B: **triple-gloves (rubber gloves and nitrile gloves over latex gloves), chemical resistant suit and boots, hard-hat, and Self-Contained Breathing Apparatus** specific for the material handled, goggles, face shield, and appropriate body protection. In the event of a large release, use impermeable gloves, specific for the material handled, chemically resistant suit and boots, and hard hat, and Self-Contained Breathing Apparatus or respirator.

Personal protective equipment are required wherever engineering controls are not adequate or conditions for potential exposure exist. Select NIOSH/MSHA approved based on actual or potential airborne concentrations in accordance with latest OSHA and/or ANSI recommendations.

6.3 ENVIRONMENTAL PRECAUTIONS:
Stop spill at source. Construct temporary dikes of dirt, sand, or any appropriate readily available material to prevent spreading of the material. Close or cap valves and/or block or plug hole in leaking container and transfer to another container. Keep from entering storm sewers and ditches which lead to waterways, and if necessary, call the local fire or police department for immediate emergency assistance.

6.4 METHODS AND MATERIAL FOR CONTAINMENT & CLEAN-UP:
Absorb spilled liquid with polypads or other suitable absorbent materials. If necessary, neutralize using suitable buffering material, (acid with soda ash or base with phosphoric acid), and test area with litmus paper to confirm neutralization. Clean up with non-combustible absorbent (such as: sand, soil, and so on). Shovel up and place all spill residue in suitable containers. dispose of at an appropriate waste disposal facility according to current applicable laws and regulations and product characteristics at time of disposal (see Section 13 - Disposal Considerations).

6.5 NOTIFICATION PROCEDURES:
In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations. US regulations require reporting release of this material to the environment which exceed the applicable reportable quantity or oil spills which could reach any waterway including intermittent dry creeks. The National Response Center can be reached at (800)424-8802.

SECTION 7. HANDLING AND STORAGE

7.1 PRECAUTIONS FOR SAFE HANDLING:
Electrostatic charge may accumulate and create a hazardous condition when pumping and handling this material. Review all operations which have the potential of generating and accumulating an electrostatic charge and/or a flammable atmosphere (including tank and container filling, splash filling, tank cleaning, sampling, gauging, switch loading, filtering, mixing, agitation, and vacuum truck operations) and use appropriate mitigating procedures. For more information, refer to OSHA Standard 29 CR 1910.106, "Flammable and Combustible Liquids", National Fire Protection Association (NFPA 77, "Recommended Practice on Static Electricity", and/or the American Petroleum Institute (API) Recommended Practice 2003, "Protection Against Ignitions Arising Out of Static, Lightning, and Stray Currents". Ensure electrical continuity by bonding and grounding (earthing) all equipment. Restrict line velocity during pumping in order to avoid generation of electrostatic discharge (<= 1 m/sec until fill pipe submerged to twice its diameter. then <= 7 m/sec). Avoid splash filling. Do NOT use compressed air for filling, discharging or handling operations. Avoid free fall of liquid. Ground containers when transferring. **Empty container very hazardous! Do not flame cut, saw, drill, braze, or weld. Continue all label precautions!**

SECTION 7. HANDLING AND STORAGE (CONTINUED)

7.2 CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES:
Vapors may ignite explosively & spread long distances. Prevent vapor buildup. Put out pilot lights & turn off heaters, electric equipment & other ignition sources during use & until all vapors are gone. Keep in fireproof surroundings. Keep separated from strong oxidants, food & feedstuffs. Keep cool. Do not store above 49 C/120 F.
Keep container tightly closed & upright when not in use to prevent leakage.

7.3 NONBULK: CONTAINERS:
Store containers in a cool, dry location, away from direct sunlight, sources of intense heat, or where freezing is possible. Material should be stored in secondary containers or in a diked area, as appropriate. Store containers away from incompatible chemicals (see Section 10, Stability and Reactivity). Post warning and "NO SMOKING" signs in storage and use areas, as appropriate. Empty containers should be handled with care. Never store food, feed, or drinking water in containers which held this product.

7.4 BULK CONTAINERS:
All tanks and pipelines which contain this material must be labeled. Perform routine maintenance on tanks or pipelines which contain this product. Report all leaks immediately to the proper personnel.

7.5 TANK CAR SHIPMENTS:
Tank cars carrying this product should be loaded and unloaded in strict accordance with tank-car manufacturer's recommendation and all established on-site safety procedures. Appropriate personal protective equipment must be used (see Section 8, Engineering Controls and Personal Protective Equipment.). All loading and unloading equipment must be inspected, prior to each use. Loading and unloading operations must be attended, at all times. Tank cars must be level, brakes must be set or wheels must be locked or blocked prior to loading or unloading. Tank car (for loading) or storage tanks (for unloading) must be verified to be correct for receiving this product and be properly prepared, prior to starting the transfer operations. Hoses must be verified to be in the correct positions, before starting transfer operations. A sample (if required) must be taken and verified (if required) prior to starting transfer operations. All lines must be blown-down and purged before disconnecting them from the tank car or vessel.

7.6 PROTECTIVE PRACTICES DURING MAINTENANCE OF CONTAMINATED EQUIPMENT:
Follow practices indicated in Section 6 (Accidental Release Measures). Make certain application equipment is locked and tagged-out safely. Always use this product in areas where adequate ventilation is provided. Collect all rinsates and dispose of according to applicable Federal, State, Provincial, or local procedures.

7.7 EMPTY CONTAINER WARNING:
Empty containers may contain residue and can be dangerous. Do not attempt to refill or clean containers without proper instructions. Empty drums should be completely drained and safely stored until appropriately reconditioned or disposed. Empty containers should be taken for recycling, recovery, or disposal through suitably qualified or licensed contractor and in accordance with governmental regulations. **DO NOT PRESSURIZE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND, OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY, OR OTHER SOURCES OF IGNITION. THEY MAY BURST AND CAUSE INJURY OR DEATH.**

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 EXPOSURE LIMITS:

MATERIAL	CAS#	EINECS#	TWA (OSHA)	TLV (ACGIH)
Methanol	67-56-1	200-659-6	200 ppm S	200 ppm S
Toluene	108-88-3	203-625-9	200 ppm	50 ppm A4
Acetone	67-64-1	200-662-2	1000 ppm	500 ppm A4
Heptane	142-82-5	205-563-8	500 ppm	400 ppm

MATERIAL	CAS#	EINECS#	CEILING	STEL(OSHA/ACGIH)	HAP
Methanol	67-56-1	200-659-6	None Known	250 ppm	Yes
Toluene	108-88-3	203-625-9	None Known	None Known	Yes
Acetone	67-64-1	200-662-2	None Known	750 ppm	No
Heptane	142-82-5	205-563-8	None Known	500 ppm	No

In addition, using manufacturers' data, based on EPA Method 311, the following EPA Hazardous Air Pollutants may be present in trace amounts (less than 0.1%):
Benzene, Mixed Xylenes, Ethylbenzene

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION (CONTINUED)

8.2 APPROPRIATE ENGINEERING CONTROLS:

RESPIRATORY EXPOSURE CONTROLS
Airborne concentrations should be kept to lowest levels possible. If vapor, dust or mist is generated and the occupational exposure limit of the product, or any component of the product, is exceeded, use appropriate NIOSH or MSHA approved air purifying or air-supplied respirator authorized in 29 CFR 1910.134, European Standard EN 149, or applicable State regulations, after determining the airborne concentration of the contaminant. Air supplied respirators should always be worn when airborne concentration of the contaminant or oxygen content is unknown. Maintain airborne contaminant concentrations below exposure limits. If adequate ventilation is not available or there is potential for airborne exposure above the exposure limits, a respirator may be worn up to the respirator exposure limitations, check with respirator equipment manufacturer's recommendations/limitations. For particulates, a particulate respirator (NIOSH Type N95 or better filters) may be worn. If oil particles (such as: lubricants, cutting fluids, glycerine, and so on) are present, use a NIOSH Type R or P filter. For a higher level of protection, use positive pressure supplied air respiration protection or Self-Contained Breathing Apparatus or if oxygen levels are below 19.5% or are unknown.

EMERGENCY OR PLANNED ENTRY INTO UNKNOWN CONCENTRATIONS OR IDLH CONDITIONS
Positive pressure, full-face piece Self-Contained Breathing Apparatus; or positive pressure, full-face piece Self-Contained Breathing Apparatus with an auxilliary positive pressure Self-Contained Breathing Apparatus.

VENTILATION

LOCAL EXHAUST:	Necessary	MECHANICAL (GENERAL):	Necessary
SPECIAL:	None	OTHER:	None

Please refer to ACGIH document, "Industrial Ventilation, A Manual of Recommended Practices", most recent edition, for details.

8.3 INDIVIDUAL PROTECTION MEASURES, SUCH AS PERSONAL PROTECTIVE EQUIPMENT:

EYE PROTECTION:
Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists or dusts. If contact is possible, chemical splash goggles should be worn, when a higher degree of protection is necessary, use splash goggles or safety glasses. Face-shields are recommended when the operation can generate splashes, sprays or mists.

HAND PROTECTION:
Use gloves chemically resistant to this material. Glove must be inspected prior to use. Preferred examples: Butyl rubber, Chlorinated Polyethylene, Polyethylene, Ethyl vinyl alcohol laminate ("EVAL"), Polyvinyl alcohol ("PVA"). Examples of acceptable glove barrier materials include: Natural rubber ("latex"), Neoprene, Nitrile/butadiene rubber ("nitrile") or ("NBR"), Polyvinyl chloride ("PVC") or "vinyl"), Viton. Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good practices. Wash and dry hands.

BODY PROTECTION:
Use body protection appropriate for task. Cover-all, rubber aprons, or chemical protective clothing made from impervious materials are generally acceptable, depending on the task.

WORK & HYGIENIC PRACTICES:
Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using toilet facilities and at the end of the working period. Provide readily accessible eye wash stations & safety showers. Remove clothing that becomes contaminated. Destroy contaminated leather articles. Launder or discard contaminated clothing.

COMPANY IDENTITY: Transchemical
PRODUCT IDENTITY: 6012

SDS DATE: 07/19/2019
ORIGINAL: 05/13/2015

SECTION 9. PHYSICAL & CHEMICAL PROPERTIES

APPEARANCE:	Liquid, Water-White
ODOR:	Ketone
ODOR THRESHOLD:	Not Available
pH (Neutrality):	Not Available
MELTING POINT/FREEZING POINT:	Not Available
BOILING RANGE (IBP,50%,Dry Point):	56 70 111 C / 133 158 232 F
FLASH POINT (TEST METHOD):	-16 C / 2 F (TCC) (Lowest Component)
EVAPORATION RATE (n-Butyl Acetate=1):	2.2
FLAMMABILITY CLASSIFICATION:	Class I B
LOWER FLAMMABLE LIMIT IN AIR (% by vol):	4.3
UPPER FLAMMABLE LIMIT IN AIR (% by vol):	Not Available
VAPOR PRESSURE (mm of Hg)@20 C	91.6
VAPOR DENSITY (air=1):	1.6
GRAVITY @ 68/68 F / 20/20 C:	
DENSITY:	0.805
SPECIFIC GRAVITY (Water=1):	0.806
POUNDS/GALLON:	6.717
WATER SOLUBILITY:	Appreciable
PARTITION COEFFICIENT (n-Octane/Water):	Not Available
AUTO IGNITION TEMPERATURE:	293 C / 560 F
DECOMPOSITION TEMPERATURE:	Not Available
TOTAL VOC'S (TVOC)*:	100.0 Vol% / 806.4 g/L / 6.7 Lbs/Gal
NONEXEMPT VOC'S (CVOC)*:	88.0 Vol% / 711.4 g/L / 5.9 Lbs/Gal
HAZARDOUS AIR POLLUTANTS (HAPS):	79.5 Wt% / 641.2 g/L / 5.3 Lbs/Gal
NONEXEMPT VOC PARTIAL PRESSURE (mm of Hg @ 20 C)	0.0
VISCOSITY @ 20 C (ASTM D445):	Not Available

* Using CARB (California Air Resources Board Rules).

SECTION 10. STABILITY & REACTIVITY

10.1 REACTIVITY & CHEMICAL STABILITY:
Stable under normal conditions, no hazardous reactions when kept from incompatibles.

10.2 POSSIBILITY OF HAZARDOUS REACTIONS & CONDITIONS TO AVOID:
Isolate from oxidizers, heat, sparks, electric equipment & open flame.

10.3 INCOMPATIBLE MATERIALS:
Reacts violently with strong oxidants, causing fire & explosion hazard.
Attacks many plastics, rubber, coatings.

10.4 HAZARDOUS DECOMPOSITION PRODUCTS:
Carbon Monoxide, Carbon Dioxide from burning.

10.5 HAZARDOUS POLYMERIZATION:
Will not occur.

SECTION 11. TOXICOLOGICAL INFORMATION

11.1 ACUTE HAZARDS

11.1.1 SKIN CONTACT:
Primary irritation to skin, defatting, dermatitis. Absorption thru skin increases exposure. Wash thoroughly after handling.

11.1.2 EYE CONTACT:
Primary irritation to eyes, redness, tearing, blurred vision.
Liquid can cause eye irritation.

11.1.3 INHALATION:
Anesthetic. Irritates respiratory tract. Acute overexposure can cause serious nervous system depression. Vapor harmful. Breathing vapor can cause irritation.
Acute overexposure can cause harm to affected organs by routes of entry.
Repeated exposure over TLV can cause blindness.
Use of alcoholic beverages enhances the harmful effect.

11.1.4 SWALLOWING:
Can be fatal or cause blindness if swallowed. Cannot be made non-poisonous.
POISON ! Can cause irreversible nervous system damage & death.
Harmful or fatal if swallowed.
Swallowing can cause abdominal irritation, nausea, vomiting & diarrhea.
The symptoms of chemical pneumonitis may not show up for a few days.

11.2 SUBCHRONIC HAZARDS/CONDITIONS AGGRAVATED

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE:
Pre-existing disorders of any target organs mentioned in this Document can be aggravated by over-exposure by routes of entry to components of this product.
Persons with these disorders should avoid use of this product.

11.3 CHRONIC HAZARDS

11.3.1 CANCER, REPRODUCTIVE & OTHER CHRONIC HAZARDS:
Pregnant women should avoid use. May cause birth defects. Leukemia been reported in humans from Benzene. This product contains less than 105 ppm of Benzene. Not considered hazardous in such low concentrations. Absorption thru skin may be harmful. Studies with laboratory animals indicate this product can cause damage to fetus.
Depending on degree of exposure, periodic medical examination is indicated.

11.3.2 TARGET ORGANS: May cause damage to target organs, based on animal data.

11.3.3 IRRITANCY: Irritating to contaminated tissue.

11.3.4 SENSITIZATION: No component is known as a sensitizer.

11.3.5 MUTAGENICITY: No known reports of mutagenic effects in humans.

11.3.6 EMBRYOTOXICITY: No known reports of embryotoxic effects in humans.

11.3.7 TERATOGENICITY: No known reports of teratogenic effects in humans.

11.3.8 REPRODUCTIVE TOXICITY: No known reports of reproductive effects in humans.

A MUTAGEN is a chemical which causes permanent changes to genetic material (DNA) such that the changes will propagate across generational lines. An EMBRYOTOXIN is a chemical which causes damage to a developing embryo (such as: within the first 8 weeks of pregnancy in humans), but the damage does not propagate across generational lines. A TERATOGEN is a chemical which causes damage to a developing fetus, but the damage does not propagate across generational lines. A REPRODUCTIVE TOXIN is any substance which interferes in any way with the reproductive process.

11.4 MAMMALIAN TOXICITY INFORMATION

MATERIAL	CAS#	EINECS#	LOWEST KNOWN LETHAL DOSE DATA
Methanol	67-56-1	200-659-6	LOWEST KNOWN LD50 (ORAL) 1000.0 mg/kg(Man)
Toluene	108-88-3	203-625-9	LOWEST KNOWN LC50 (VAPORS) 5300 ppm (Mice)
Toluene	108-88-3	203-625-9	LOWEST KNOWN LD50 (SKIN) 4000.0 mg/kg (Rabbits)

SECTION 12. ECOLOGICAL INFORMATION

12.1 ALL WORK PRACTICES MUST BE AIMED AT ELIMINATING ENVIRONMENTAL CONTAMINATION.

12.2 EFFECT OF MATERIAL ON PLANTS AND ANIMALS:
This product may be harmful or fatal to plant and animal life if released into the environment. Refer to Section 11 (Toxicological Information) for further data on the effects of this product's components on test animals.

12.3 EFFECT OF MATERIAL ON AQUATIC LIFE:
The most sensitive known aquatic group to any component of this product is:
Mosquito Fish 250 ppm or mg/L (24 hour exposure).
Keep out of sewers and natural water supplies.
The substance is toxic to aquatic organisms.
Bioaccumulation of this chemical may occur in aquatic animals.

12.4 MOBILITY IN SOIL
This material is a mobile liquid.

12.5 DEGRADABILITY
This product is partially biodegradable.

12.6 ACCUMULATION
This product does not accumulate or biomagnify in the environment.

SECTION 13. DISPOSAL CONSIDERATIONS

THE GENERATION OF WASTE SHOULD BE AVOIDED OR MINIMIZED WHEREVER POSSIBLE.
Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers and liners may retain some product residues. Vapor from some product residues may create a highly flammable or explosive atmosphere inside the container. **DO NOT PRESSURIZE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND, OR EXPOSE USED CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY, OR OTHER SOURCES OF IGNITION. THEY MAY BURST AND CAUSE INJURY OR DEATH.** Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Processing, use or contamination may change the waste disposal requirements. Do not dispose of on land, in surface waters, or in storm drains. Waste should be recycled or disposed of in accordance with regulations. Large amounts should be collected for reuse or consigned to licensed hazardous waste haulers for disposal.
ALL DISPOSAL MUST BE IN ACCORDANCE WITH ALL FEDERAL, STATE, PROVINCIAL, AND LOCAL REGULATIONS. IF IN DOUBT, CONTACT PROPER AGENCIES. EPA CHARACTERISTIC: D001

SECTION 14. TRANSPORT INFORMATION

IF > 3089 LB / 1404 KG OF THIS PRODUCT IS IN 1 CONTAINER, IT EXCEEDS THE RQ OF TOLUENE. "RQ" MUST BE PUT BEFORE THE DOT SHIPPING NAME.

MARINE POLLUTANT: No
DOT/TDG SHIP NAME: UN1992, Flammable Liquids, Toxic, n.o.s.
(Contains: Methanol, Toluene), 3, (6.1), PG-II
IATA / ICAO: UN1992, Flammable Liquids, Toxic, n.o.s.
(Contains: Methanol, Toluene), 3, (6.1), PG-II
IMO / IMDG: UN1992, Flammable Liquids, Toxic, n.o.s.
(Contains: Methanol, Toluene), 3, (6.1), PG-II
EMERGENCY RESPONSE GUIDEBOOK NUMBER: 131

SECTION 15. REGULATORY INFORMATION

15.1 EPA REGULATION:
SARA SECTION 311/312 HAZARDS: Acute Health, Fire

All components of this product are on the TSCA list.
SARA Title III Section 313 Supplier Notification
This product contains the indicated <*> toxic chemicals subject to the reporting requirements of Section 313 of the Emergency Planning & Community Right-To-Know Act of 1986 & of 40 CFR 372. This information must be included in all MSDSs that are copied and distributed for this material.

SECTION 15. REGULATORY INFORMATION (CONTINUED)

SARA TITLE III INGREDIENTS	CAS#	EINECS#	WT%	(REG.SECTION)	RQ(LBS)
*Methanol	67-56-1	200-659-6	40-50	(311,312,313,RCRA)	5000
*Toluene	108-88-3	203-625-9	25-35	(311,312,313,RCRA)	1000
Acetone	67-64-1	200-662-2	5-15	(311,312)	5000

Any release equal to or exceeding the RQ must be reported to the National Response Center (800-424-8802) and appropriate state and local regulatory agencies as described in 40 CFR 302.6 and 40 CFR 355.40 respectively. Failure to report may result in substantial civil and criminal penalties. State & local regulations may be more restrictive than federal regulations.

15.2 STATE REGULATIONS:
CALIFORNIA SAFE DRINKING WATER & TOXIC ENFORCEMENT ACT (PROPOSITION 65):
This product contains the following chemicals known to the State of California to cause reproductive toxicity: Methanol, Toluene

15.3 INTERNATIONAL REGULATIONS
The identified components of this product are listed on the chemical inventories of the following countries:
Australia (AICS), Canada (DSL or NDSL), China (IECSC), Europe (EINECS, ELINCS), Japan (METI/CSCL, MHLW/ISHL), South Korea (KECI), New Zealand (NZIoC), Philippines (PICCS), Switzerland (SWISS), Taiwan (NECSI), USA (TSCA).

15.4 CANADA: WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM (WHMIS)
B2: Flammable Liquid.
D2B: Irritating to skin / eyes.

This product was classified using the hazard criteria of the Controlled Products Regulations (CPR). This Document contains all information required by the CPR.

SECTION 16. OTHER INFORMATION

16.1 HAZARD RATINGS:
HEALTH (NFPA): 1, HEALTH (HMIS): 3, FLAMMABILITY: 3, PHYSICAL HAZARD: 0
(Personal Protection Rating to be supplied by user based on use conditions.)
This information is intended solely for the use of individuals trained in the NFPA & HMIS hazard rating systems.

16.2 EMPLOYEE TRAINING
See Section 2 (Hazards Identification). Employees should be made aware of all hazards of this material (as stated in this SDS) before handling it.

16.3 SDS REVISION DATE: 07/19/2019

NOTICE

The supplier disclaims all expressed or implied warranties of merchantability or fitness for a specific use, with respect to the product or the information provided herein, except for conformation to contracted specifications. All information appearing herein is based upon data obtained from manufacturers and/or recognized technical sources. While the information is believed to be accurate, we make no representations as to its accuracy or sufficiency.
Conditions of use are beyond our control, and therefore users are responsible for verifying the data under their own operating conditions to determine whether the product is suitable for their particular purposes and they assume all risks of their handling, and disposal of the product. Users also assume all risks in regards to the publication or use of, or reliance upon information contained herein.
This information relates only to the product designated herein, and does not relate to its use in combination with any other material or process.

Carrier
WeatherMaker

Rooftop Units

48TC

Gas Heating / Electric Cooling with Puron® (R-410A) Refrigerant

6 to 27.5 Nominal Tons

48TC WeatherMaker® rooftop units were designed by customers for customers. With a gauge plug, centralized control center, plug & play accessory board, “no-strip screw” collars, and handled access panels, we’ve made the unit easy to install, easy to maintain, and easy to use. Units are pre-wired and pre-charged with environmentally sound Puron® (R-410A) refrigerant at the factory. The units are factory tested in both heating and cooling modes.

FEATURES

OPTIONS

PHYSICAL DATA

DOCUMENTS

Nominal Cooling Ton Size	Cooling Stages	AHRI Efficiency (SEER) EER	Dimensions (in) LxWxH	Low Gas Heating Input (MBtuh)	Medium Gas Heating Input (MBtuh)	High Gas Heating Input (MBtuh)	Approx. Unit Weight (lbs)
6	1	11.0	74 x 47 x 41	72	125	150	652
7.5	1	11.0	88 x 59 x 41	125	180	224	780
7.5	2	11.0	88 x 59 x 41	125	180	224	835

8.5	1	11.0	88 x 59 x 49	125	180	224	920
8.5	2	11.0	88 x 59 x 49	125	180	224	930
10	1	11.0	88 x 59 x 49	180	224	250	930
10	2	11.1	88 x 59 x 49	180	224	250	940
12.5	2	10.8	88 x 59 x 49	150	180	240	1167
15	2	10.8	116 x 63 x 57	220	310	400	1380
15	2	10.8	128 x 87 x 49	220	310	400	1907
17.5	2	10.8	128 x 87 x 49	220	310	400	1922
20	2	9.8	141 x 87 x 49	220	310	400	2072
25	2	9.8	141 x 87 x 49	220	310	400	2197
27.5	2	10.2	158 x 87 x 57	220	310	400	2320

AHRI = Air-Conditioning, Heating & Refrigeration Institute
ASHRAE = American Society of Heating, Refrigerating and Air Conditioning, Inc.
EER = Energy Efficiency Ratio
SEER = Seasonal Energy Efficiency Ratio

NOTES
1. Rated and certified under ARI Standard 210/240---06 or 340/360---07, as appropriate.
2. Ratings are based on:
» **Cooling Standard:** 80°F (27°C) db, 67°F (19°C) wb indoor air temp and 95°F (35°C) db outdoor air temp.
3. All 48TC units comply with ASHRAE 90.1-2010 Energy Standard for minimum SEER and EER requirements.
4. 48TC units comply with US Energy Policy Act (2005). To evaluate code compliance requirements, refer to state and local codes or visit the following website: http://bcap-energy.org

California residents please see Proposition 65

Expert