

Revision Date: 10/12/2018

SAFETY DATA SHEET

1. Identification

Material name: ALPHAGUARD MT TOP COAT DARK GRAY 5 GL

Material: 351614 805

Recommended use and restriction on use

Recommended use: Coatings Restrictions on use: Not known.

Manufacturer/Importer/Supplier/Distributor Information

Tremco Incorporated 3735 Green Road BEACHWOOD OH 44122

US

Contact person: **EH&S** Department Telephone: 216-292-5000

Emergency telephone number: 1-800-424-9300 (US); 1-613-996-6666 (Canada)

2. Hazard(s) identification

Hazard Classification

Health Hazards

Acute toxicity (Inhalation - dust and Category 4

mist)

Respiratory sensitizer Category 1 Skin sensitizer Category 1 Carcinogenicity Category 1A

Unknown toxicity - Health

Acute toxicity, oral 3.46 % Acute toxicity, dermal 29.17 % 99.73 % Acute toxicity, inhalation, vapor Acute toxicity, inhalation, dust 82.24 %

or mist

Environmental Hazards

Acute hazards to the aquatic Category 2

environment

Unknown toxicity - Environment

Acute hazards to the aquatic 86.17 %

environment

Chronic hazards to the aquatic

environment

100 %



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Label Elements

Hazard Symbol:



Signal Word: Danger

Hazard Statement: Harmful if inhaled.

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

May cause an allergic skin reaction.

May cause cancer. Toxic to aquatic life.

Precautionary Statements

Prevention: Avoid breathing dust/fume/gas/mist/vapors/spray. Use only outdoors or in a

> well-ventilated area. [In case of inadequate ventilation] wear respiratory protection. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves/protective clothing/eye protection/face protection. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective

equipment as required.

Response: IF INHALED: Remove person to fresh air and keep comfortable for

breathing. If experiencing respiratory symptoms: Call a POISON

CENTER/doctor. IF ON SKIN: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice/attention. Call a POISON CENTER/doctor if you feel unwell. Specific treatment (see on this label). Wash contaminated

clothing before reuse.

Storage: Store locked up.

Disposal: Dispose of contents/container to an appropriate treatment and disposal

facility in accordance with applicable laws and regulations, and product

characteristics at time of disposal.

Hazard(s) not otherwise

classified (HNOC):

None.

3. Composition/information on ingredients

Mixtures

Chemical Identity CAS nu	umber Content in percent (%)*
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Aluminum hydroxide	21645-51-2	7 - 13%
Calcium carbonate	471-34-1	7 - 13%
Polyvinyl chloride	9002-86-2	3 - 7%
Titanium dioxide	13463-67-7	1 - 5%
Isophorone Diisocyanate	4098-71-9	1 - 5%
Zinc oxide	1314-13-2	1 - 5%
Calcium oxide	1305-78-8	1 - 5%
Dibutyl tin dilaurate	77-58-7	0.1 - 1%
Stearic acid	57-11-4	0.1 - 1%
Carbon Black	1333-86-4	0.1 - 1%
Hydrotreated heavy	64742-52-5	0.1 - 1%
naphthenic distillate		
Aluminum oxide	1344-28-1	0.1 - 1%
Iron oxide	1309-37-1	0.1 - 1%

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

4. First-aid measures

Ingestion: Call a POISON CENTER/doctor if you feel unwell. Rinse mouth.

Inhalation: Call a physician or poison control center immediately. If breathing stops,

provide artificial respiration. Move to fresh air. If breathing is difficult, give

oxygen.

Skin Contact: If skin irritation occurs: Get medical advice/attention. Destroy or thoroughly

clean contaminated shoes. Immediately remove contaminated clothing and shoes and wash skin with soap and plenty of water. If skin irritation or an

allergic skin reaction develops, get medical attention.

Eye contact: Any material that contacts the eye should be washed out immediately with

water. If easy to do, remove contact lenses. If eye irritation persists: Get

medical advice/attention.

Most important symptoms/effects, acute and delayed

Symptoms: May cause skin and eye irritation.

Indication of immediate medical attention and special treatment needed

Treatment: Symptoms may be delayed.

5. Fire-fighting measures

General Fire Hazards: No unusual fire or explosion hazards noted.

Suitable (and unsuitable) extinguishing media

Suitable extinguishing

media:

Use fire-extinguishing media appropriate for surrounding materials.



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Unsuitable extinguishing

media:

Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from

the chemical:

During fire, gases hazardous to health may be formed.

Special protective equipment and precautions for firefighters

Special fire fighting

procedures:

No data available.

Special protective equipment

for fire-fighters:

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: Ventilate closed spaces before entering them. Evacuate area. See Section 8 of the SDS for Personal Protective Equipment. Keep upwind. Keep unauthorized personnel away. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.

Methods and material for containment and cleaning

up:

Dam and absorb spillages with sand, earth or other non-combustible material. Collect spillage in containers, seal securely and deliver for

disposal according to local regulations.

Notification Procedures: In the event of a spill or accidental release, notify relevant authorities in

accordance with all applicable regulations.

Environmental Precautions: Avoid release to the environment. Prevent further leakage or spillage if safe

to do so.

7. Handling and storage

Precautions for safe handling:

Do not handle until all safety precautions have been read and understood. Obtain special instructions before use. Use personal protective equipment as required. Do not breathe dust/fume/gas/mist/vapors/spray. Avoid contact with eyes, skin, and clothing. Wash hands thoroughly after handling. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities:

Store locked up.

8. Exposure controls/personal protection

Control Parameters

Occupational Exposure Limits

Chemical Identity	Туре	Exposure Limit Values	Source
Aluminum hydroxide - Respirable fraction.	TWA	1 mg/m3	US. ACGIH Threshold Limit Values (2011)
	TWA	5 mg/m3	US. OSHA Table Z-3 (29 CFR 1910.1000) (03 2016)



Aluminum hydroxide	Alternative and the T. C.	T T A / A			LIO OOLIA T-bl- 7.0 (00 OFD 1010 1000) (00
Aluminum hydroxide - Respirable fraction. 15 millions of particles per cubic foot of air large of particles per c	Aluminum hydroxide - Total dust.	TWA		_	
Respirable fraction.		TWA	particl cubic	es per foot of air	2016)
Calcium carbonate PEL 5 mg/m3 US. OSHA Table Z-1 (Imits for Air Contaminants (29 CFR 1910.1000) (02 2006)	Aluminum hydroxide - Respirable fraction.	TWA	particle	es per foot of	
Respirable fraction.			15 r	ng/m3	Contaminants (29 CFR 1910.1000) (02 2006)
Respirable fraction.	Respirable fraction.			ŭ	Contaminants (29 CFR 1910.1000) (02 2006)
(29 CFR 1910.1001-1053) (02 2006)	Respirable fraction.			ng/m3	
Q2 CFR 1910, 1001-1053) (02 2006) Q2 CRR 1910, 1001-1053) (02 2006) Q2 CFR 1910, 1000, 102 2006] Q3 CFR 1910, 1000, 102 2006] Q4 CFR 1910, 1000, 102 2006] Q5 CFR 1910, 10					(29 CFR 1910.1001-1053) (02 2006)
Polyvinyl chloride - Respirable fraction. PEL 5 mg/m3 Us. OSHA Table 2-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006) POlyvinyl chloride - Total dust. TWA 5 mg/m3 Us. OSHA Table 2-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006) Us. OSHA Table 2-3 (29 CFR 1910.1000) (02 2006) Us. OSHA Table 2-3 (29 CFR 1910.1000) (02 2006) Us. OSHA Table 2-3 (29 CFR 1910.1000) (02 2006) Us. OSHA Table 2-3 (29 CFR 1910.1000) (02 2006) Us. OSHA Table 2-3 (29 CFR 1910.1000) (02 2006) Us. OSHA Table 2-3 (29 CFR 1910.1000) (02 2006) Us. OSHA Table 2-3 (29 CFR 1910.1000) (02 2006) Us. OSHA Table 2-3 (29 CFR 1910.1000) (02 2006) Us. OSHA Table 2-3 (29 CFR 1910.1000) (02 2006) Us. OSHA Table 2-3 (29 CFR 1910.1000) (02 2006) Us. OSHA Table 2-3 (29 CFR 1910.1000) (02 2006) Us. OSHA Table 2-3 (29 CFR 1910.1000) (02 2006) Us. OSHA Table 2-3 (29 CFR 1910.1000) (02 2006) Us. OSHA Table 2-3 (29 CFR 1910.1000) (02 2006) Us. OSHA Table 2-3 (29 CFR 1910.1000) (02 2006) Us. OSHA Table 2-3 (29 CFR 1910.1000) (02 2006) Us. OSHA Table 2-3 (29 CFR 1910.1000) (03 2016) Us. OSHA Table 2-3 (29 CFR 1910.1000) (03 2016) Us. OSHA Table 2-3 (29 CFR 1910.1000) (03 2016) Us. OSHA Table 2-3 (29 CFR 1910.1000) (03 2016) Us. OSHA Table 2-3 (29 CFR 1910.1000) (03 2016) Us. OSHA Table 2-3 (29 CFR 1910.1000) (03 2016) Us. OSHA Table 2-3 (29 CFR 1910.1000) (03 2016) Us. OSHA Table 2-3 (29 CFR 1910.1000) (03 2016) Us. OSHA Table 2-3 (29 CFR 1910.1000) (03 2016) Us. OSHA Table 2-3 (29 CFR 1910.1000) (03 2016) Us. OSHA Table 2-3 (29 CFR 1910.1000) (03 2016) Us. OSHA Table 2-3 (29 CFR 1910.1000) (03 2016) Us. OSHA Table 2-3 (29 CFR 1910.1000) (03 2016) Us. OSHA Table 2-3 (29 CFR 1910.1000) (03 2016) Us. OSHA Table 2-3 (29 CFR 1910.1000) (03 2016) Us. OSHA Table 2-3 (29 CFR 1910.1000) (03 2016) Us. OSHA Table 2-3 (29 CFR 1910.1000) (03 2016) Us. OSHA Table 2-3 (29 CFR 1910.1000) (03 2016) Us. OSHA Table 2-3 (29 CFR 1910.1000) (03 2016) Us. OSHA Table 2-3 (29 CFR					(29 CFR 1910.1001-1053) (02 2006)
Respirable fraction.		Т _			(29 CFR 1910.1001-1053) (02 2006)
Delivinyl chloride - TWA So millions of particles per cubic foot of air Titanium dioxide - Total dust. TWA So millions of particles per cubic foot of air Titanium dioxide - Total dust. TWA So millions of particles per cubic foot of air TWA So millions of particles	Respirable fraction.			ŭ	Contaminants (29 CFR 1910.1000) (02 2006)
Polyvinyl chloride - Respirable fraction.	dust.				Contaminants (29 CFR 1910.1000) (02 2006)
Respirable fraction.		IWA	particle	es per foot of	
Polyvinyl chloride - Total dust.	Polyvinyl chloride - Respirable fraction.	TWA	particle	es per foot of	
Respirable fraction. Titanium dioxide TWA 10 mg/m3 US. ACGIH Threshold Limit Values (2011)	Polyvinyl chloride - Total dust.	TWA	15 r		
Titanium dioxide - Total dust. PEL 15 mg/m3 US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006) Titanium dioxide - Respirable fraction. TWA 15 millions of particles per cubic foot of air US. OSHA Table Z-3 (29 CFR 1910.1000) (03 2016) Titanium dioxide - Total dust. TWA 5 mg/m3 US. OSHA Table Z-3 (29 CFR 1910.1000) (03 2016) Titanium dioxide - Respirable fraction. TWA 50 millions of particles per cubic foot of air US. OSHA Table Z-3 (29 CFR 1910.1000) (03 2016) Isophorone Diisocyanate TWA 50 millions of particles per cubic foot of air US. OSHA Table Z-3 (29 CFR 1910.1000) (03 2016) Zinc oxide - Respirable fraction. TWA 0.005 ppm US. ACGIH Threshold Limit Values (2011) Zinc oxide - Respirable fraction. STEL 10 mg/m3 US. ACGIH Threshold Limit Values (2011) Zinc oxide - Fume. PEL 5 mg/m3 US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006) Zinc oxide - Respirable fraction. PEL 15 mg/m3 US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006) Zinc oxide - Respirable fraction. TWA 2 mg/m3 US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006) Zinc oxide -	Polyvinyl chloride - Respirable fraction.	TWA	5 r	ng/m3	
Titanium dioxide - Total dust. PEL 15 mg/m3 US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006) Titanium dioxide - Respirable fraction. TWA 15 millions of particles per cubic foot of air US. OSHA Table Z-3 (29 CFR 1910.1000) (03 2016) Titanium dioxide - Total dust. TWA 5 mg/m3 US. OSHA Table Z-3 (29 CFR 1910.1000) (03 2016) Titanium dioxide - Respirable fraction. TWA 50 millions of particles per cubic foot of air US. OSHA Table Z-3 (29 CFR 1910.1000) (03 2016) Isophorone Diisocyanate TWA 50 millions of particles per cubic foot of air US. OSHA Table Z-3 (29 CFR 1910.1000) (03 2016) Zinc oxide - Respirable fraction. TWA 0.005 ppm US. ACGIH Threshold Limit Values (2011) Zinc oxide - Respirable fraction. STEL 10 mg/m3 US. ACGIH Threshold Limit Values (2011) Zinc oxide - Fume. PEL 5 mg/m3 US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006) Zinc oxide - Respirable fraction. PEL 15 mg/m3 US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006) Zinc oxide - Respirable fraction. TWA 2 mg/m3 US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006) Zinc oxide -	Titanium dioxide	TWA	10 r	ng/m3	US. ACGIH Threshold Limit Values (2011)
Titanium dioxide - Respirable fraction. TWA 15 millions of particles per cubic foot of particles per cubic foot of air US. OSHA Table Z-3 (29 CFR 1910.1000) (03 2016) Titanium dioxide - Total dust. TWA 15 mg/m3 US. OSHA Table Z-3 (29 CFR 1910.1000) (03 2016) Titanium dioxide - Respirable fraction. TWA 5 mg/m3 US. OSHA Table Z-3 (29 CFR 1910.1000) (03 2016) Titanium dioxide - Total dust. TWA 50 millions of particles per cubic foot of air US. OSHA Table Z-3 (29 CFR 1910.1000) (03 2016) Isophorone Diisocyanate TWA 0.005 ppm US. ACGIH Threshold Limit Values (2011) Zinc oxide - Respirable fraction. STEL 10 mg/m3 US. ACGIH Threshold Limit Values (2011) Zinc oxide - Total dust. PEL 5 mg/m3 US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006) Zinc oxide - Total dust. PEL 5 mg/m3 US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006) Zinc oxide - Respirable fraction. PEL 5 mg/m3 US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006) Zinc oxide - Respirable fraction. TWA 2 mg/m3 US. ACGIH Threshold Limit Values (2011) VS. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000		PEL	15 r	ng/m3	
Titanium dioxide - Total dust. TWA 15 mg/m3 US. OSHA Table Z-3 (29 CFR 1910.1000) (03 2016) Titanium dioxide - Respirable fraction. Titanium dioxide - Total dust. TWA 50 millions of particles per cubic foot of air Isophorone Diisocyanate TWA 70.005 ppm US. ACGIH Threshold Limit Values (2011) TWA 2 mg/m3 US. ACGIH Threshold Limit Values (2011) US. ACGIH Threshold Limit Values (2011) TWA 2 mg/m3 US. ACGIH Threshold Limit Values (2011) TWA 2 mg/m3 US. ACGIH Threshold Limit Values (2011) TWA Tonto oxide - Fume. PEL 5 mg/m3 US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006) Tonto oxide - Respirable fraction. TWA 2 mg/m3 US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006) Tonto oxide - Respirable fraction. TWA 2 mg/m3 US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006) Tonto oxide - Respirable fraction. TWA 2 mg/m3 US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006) Tonto oxide - Respirable fraction. TWA 2 mg/m3 US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006) TWA 2 mg/m3 US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006) TWA 2 mg/m3 US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006) TWA 2 mg/m3 US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)	Titanium dioxide - Respirable fraction.	TWA	particle	es per foot of	US. OSHA Table Z-3 (29 CFR 1910.1000) (03
fraction. Titanium dioxide - Total dust. Isophorone Diisocyanate Titanium dioxide - Respirable Titanium dioxide - Respirable Titanium dioxide - Respirable Titanium dioxide - Total dust. Titanium dioxide - Total dust dust dust. Titanium dioxide - Respirable dust dust dust dust dust dust dust dust	Titanium dioxide - Total dust.	TWA	15 r		
Sophorone Diisocyanate TWA 0.005 ppm US. ACGIH Threshold Limit Values (2011)	Titanium dioxide - Respirable fraction.	TWA		J	2016)
Isophorone Diisocyanate TWA 0.005 ppm US. ACGIH Threshold Limit Values (2011)	Titanium dioxide - Total dust.	TWA	particle	es per foot of	
Zinc oxide - Respirable fraction. TWA 2 mg/m3 US. ACGIH Threshold Limit Values (2011) Zinc oxide - Fume. PEL 5 mg/m3 US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006) Zinc oxide - Total dust. PEL 15 mg/m3 US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006) Zinc oxide - Respirable fraction. PEL 5 mg/m3 US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006) Calcium oxide TWA 2 mg/m3 US. ACGIH Threshold Limit Values (2011) PEL 5 mg/m3 US. ACGIH Threshold Limit Values (2011) VS. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006) US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)	Isophorone Diisocyanate	TWA	0.005 ppm	-	US. ACGIH Threshold Limit Values (2011)
Zinc oxide - Fume. PEL 5 mg/m3 US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006) Zinc oxide - Total dust. PEL 15 mg/m3 US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006) Zinc oxide - Respirable fraction. PEL 5 mg/m3 US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006) Calcium oxide TWA 2 mg/m3 US. ACGIH Threshold Limit Values (2011) PEL 5 mg/m3 US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)	Zinc oxide - Respirable fraction.		• • • • • • • • • • • • • • • • • • • •	ng/m3	
Contaminants (29 CFR 1910.1000) (02 2006) Zinc oxide - Total dust.		STEL	10 r	ng/m3	US. ACGIH Threshold Limit Values (2011)
Zinc oxide - Total dust. PEL 15 mg/m3 US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006) Zinc oxide - Respirable fraction. PEL 5 mg/m3 US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006) Calcium oxide TWA 2 mg/m3 US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006) TWA PEL 5 mg/m3 US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)	Zinc oxide - Fume.	PEL	5 r	ng/m3	
Zinc oxide - Respirable fraction. Calcium oxide TWA PEL 5 mg/m3 US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006) US. ACGIH Threshold Limit Values (2011) PEL 5 mg/m3 US. OSHA Table Z-1 Limits for Air US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)	Zinc oxide - Total dust.	PEL	15 r	ng/m3	US. OSHA Table Z-1 Limits for Air
PEL 5 mg/m3 US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)	Zinc oxide - Respirable fraction.			Ū	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
Contaminants (29 CFR 1910.1000) (02 2006)	Calcium oxide		2 r	ng/m3	US. ACGIH Threshold Limit Values (2011)
Dibutyl tin dilaurate - as Sn STEL 0.2 mg/m3 US. ACGIH Threshold Limit Values (2011)				•	Contaminants (29 CFR 1910.1000) (02 2006)
	Dibutyl tin dilaurate - as Sn	STEL	0.2 r	ng/m3	US. ACGIH Threshold Limit Values (2011)



	TWA	0.1 mg/m3	US. ACGIH Threshold Limit Values (2011)
	PEL	0.1 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
Stearic acid - Respirable fraction.	TWA	3 mg/m3	US. ACGIH Threshold Limit Values (03 2017)
Stearic acid - Inhalable fraction.	TWA	10 mg/m3	US. ACGIH Threshold Limit Values (03 2017)
Carbon Black - Inhalable fraction.	TWA	3 mg/m3	US. ACGIH Threshold Limit Values (2011)
Carbon Black	PEL	3.5 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
Hydrotreated heavy naphthenic distillate - Inhalable fraction.	TWA	5 mg/m3	US. ACGIH Threshold Limit Values (03 2014)
Hydrotreated heavy naphthenic distillate	PEL	500 ppm 2,000 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
Hydrotreated heavy naphthenic distillate - Mist.	PEL	5 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
Aluminum oxide - Respirable fraction.	TWA	1 mg/m3	US. ACGIH Threshold Limit Values (2011)
	PEL	5 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
Aluminum oxide - Total dust.	PEL	15 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
	TWA	50 millions of particles per cubic foot of air	US. OSHA Table Z-3 (29 CFR 1910.1000) (03 2016)
Aluminum oxide - Respirable fraction.	TWA	15 millions of particles per cubic foot of air	US. OSHA Table Z-3 (29 CFR 1910.1000) (03 2016)
	TWA	5 mg/m3	US. OSHA Table Z-3 (29 CFR 1910.1000) (03 2016)
Aluminum oxide - Total dust.	TWA	15 mg/m3	US. OSHA Table Z-3 (29 CFR 1910.1000) (03 2016)
Iron oxide - Respirable fraction.	TWA	5 mg/m3	US. ACGIH Threshold Limit Values (2011)
Iron oxide - Fume.	PEL	10 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
Iron oxide - Total dust.	TWA	50 millions of particles per cubic foot of air	US. OSHA Table Z-3 (29 CFR 1910.1000) (03 2016)
Iron oxide - Respirable fraction.	TWA	5 mg/m3	US. OSHA Table Z-3 (29 CFR 1910.1000) (03 2016)
	TWA	15 millions of particles per cubic foot of air	US. OSHA Table Z-3 (29 CFR 1910.1000) (03 2016)
Iron oxide - Total dust.	TWA	15 mg/m3	US. OSHA Table Z-3 (29 CFR 1910.1000) (03 2016)



Chemical name	Туре	Exposure Limit Values	Source
Aluminum hydroxide - Respirable.	TWA	1 mg/m3	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
Aluminum hydroxide - Respirable fraction.	TWA	3 mg/m3	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (05 2013)
Aluminum hydroxide - Total dust.	TWA	10 mg/m3	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (05 2013)
Aluminum hydroxide - Respirable fraction.	TWA	1 mg/m3	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)
Aluminum hydroxide - Inhalable fraction.	TWA	10 mg/m3	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (06 2015)
Aluminum hydroxide - Respirable fraction.	TWA	3 mg/m3	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (06 2015)
Aluminum hydroxide - Total dust.	TWA	10 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017)
Calcium carbonate - Total dust.	STEL	20 mg/m3	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
Calcium carbonate - Respirable fraction.	TWA	3 mg/m3	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
Calcium carbonate - Total dust.	TWA	10 mg/m3	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
Calcium carbonate - Total dust.	TWA	10 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017)
Polyvinyl chloride - Respirable.	TWA	1 mg/m3	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
Polyvinyl chloride - Respirable fraction.	TWA	1 mg/m3	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)
Polyvinyl chloride - Total dust.	TWA	10 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017)
Titanium dioxide - Total dust.	TWA	10 mg/m3	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
Titanium dioxide - Respirable fraction.	TWA	3 mg/m3	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
Titanium dioxide	TWA	10 mg/m3	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)
Titanium dioxide - Total dust.	TWA	10 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017)
Isophorone Diisocyanate	TWA	0.005 ppm	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
	CEILING	0.01 ppm	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances,



			Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
Isophorone Diisocyanate	TWA	0.005 ppm	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (06 2015)
	CEV	0.02 ppm	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (06 2015)
Isophorone Diisocyanate	TWA	0.005 ppm 0.045 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017)
Diisodecyl phthalate	TWA	5 mg/m3	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)
Zinc oxide - Respirable.	TWA	2 mg/m3	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
	STEL	10 mg/m3	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
Zinc oxide - Respirable fraction.	TWA	2 mg/m3	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)
	STEL	10 mg/m3	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)
Zinc oxide - Fume.	TWA	5 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017)
	STEL	10 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017)
Zinc oxide - Total dust.	TWA	10 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017)
Calcium oxide	TWA	2 mg/m3	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
Calcium oxide	TWA	2 mg/m3	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)
Calcium oxide	TWA	2 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017)
Carbon Black - Inhalable	TWA	3 mg/m3	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (09 2011)
Carbon Black - Inhalable fraction.	TWA	3 mg/m3	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (06 2015)
Carbon Black	TWA	3.5 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017)
Hydrotreated heavy naphthenic distillate - Mist.	TWA	0.2 mg/m3	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (05 2013)
	TWA	1 mg/m3	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (05 2013)
Hydrotreated heavy naphthenic distillate - Inhalable fraction.	TWA	5 mg/m3	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (06 2015)
	TWA	5 mg/m3	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (06 2015)



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Hydrotreated heavy naphthenic distillate - Mist.	STEL	10 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017)
	TWA	5 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017)

Appropriate Engineering

Controls

Observe good industrial hygiene practices. Observe occupational exposure limits and minimize the risk of inhalation of vapors and mist. Mechanical

ventilation or local exhaust ventilation may be required.

Individual protection measures, such as personal protective equipment

General information: Use personal protective equipment as required.

Eye/face protection: Wear goggles/face shield.

Skin Protection

Hand Protection: Use suitable protective gloves if risk of skin contact.

Other: Wear chemical-resistant gloves, footwear, and protective clothing

appropriate for the risk of exposure. Contact health and safety professional

or manufacturer for specific information.

Respiratory Protection: If engineering controls do not maintain airborne concentrations below

recommended exposure limits (where applicable) or to an acceptable level

(in countries where exposure limits have not been established), an approved respirator must be worn. Air-purifying respirator with an appropriate, government approved (where applicable), air-purifying filter,

cartridge or canister. Contact health and safety professional or

manufacturer for specific information.

Hygiene measures: Observe good industrial hygiene practices. Wash hands before breaks and

immediately after handling the product. Contaminated work clothing should

not be allowed out of the workplace. Avoid contact with skin.

9. Physical and chemical properties

Appearance

Physical state:liquidForm:liquidColor:Dark gray

Odor: Mild petroleum/solvent
Odor threshold: No data available.

pH: No data available.

Melting point/freezing point: No data available.

Initial boiling point and boiling range: No data available.

Flash Point: > 100 °C > 212 °F(Setaflash Closed Cup)

Evaporation rate: Slower than Ether

Flammability (solid, gas):

No
Upper/lower limit on flammability or explosive limits

Flammability limit - upper (%): No data available.



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Flammability limit - lower (%):

Explosive limit - upper (%):

No data available.

Vapor density: Vapors are heavier than air and may travel along the floor and

in the bottom of containers.

Relative density: 1.32

Solubility(ies)

Solubility in water: Practically Insoluble
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: No data available.

Chemical Stability: Material is stable under normal conditions.

Possibility of hazardous

reactions:

No data available.

Conditions to avoid: Avoid heat or contamination.

Incompatible Materials: Alcohols. Amines. Strong acids. Strong bases. Water, moisture.

Hazardous Decomposition

Products:

Thermal decomposition or combustion may liberate carbon oxides and

other toxic gases or vapors.

11. Toxicological information

Information on likely routes of exposure

Inhalation: In high concentrations, vapors, fumes or mists may irritate nose, throat and

mucus membranes.

Skin Contact: Causes mild skin irritation. May cause an allergic skin reaction.

Eye contact: Eye contact is possible and should be avoided.

Ingestion: May be ingested by accident. Ingestion may cause irritation and malaise.

Symptoms related to the physical, chemical and toxicological characteristics

Inhalation: No data available.

Skin Contact: No data available.

Eye contact: No data available.



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Ingestion: No data available.

Information on toxicological effects

Acute toxicity (list all possible routes of exposure)

Oral

Product: ATEmix: 39,638.26 mg/kg

Dermal

Product: ATEmix: 13,498.01 mg/kg

Inhalation

Product: ATEmix: 2.62 mg/l

Repeated dose toxicity

Product: No data available.

Skin_Corrosion/Irritation

Product: No data available.

Specified substance(s):

Aluminum hydroxide in vivo (Rabbit): Not classified as an Irritant Experimental result, Key study

Calcium carbonate in vivo (Rabbit): Not irritant Experimental result, Key study

Titanium dioxide in vivo (Rabbit): Not irritant Experimental result, Supporting study

Zinc oxide in vivo (Rabbit): Not irritant Experimental result, Key study

Calcium oxide in vivo (Rabbit): Irritating Read-across from supporting substance (structural

analogue or surrogate), Key study

Dibutyl tin dilaurate In vitro (Human, in vitro reconstituted epidermis model): Not irritant

Experimental result, Supporting study

Stearic acid in vivo (Rabbit): Not irritant Experimental result, Key study

Carbon Black in vivo (Rabbit): Not irritant Experimental result, Key study

Hydrotreated heavy naphthenic distillate

in vivo (Rabbit): Not irritant Experimental result, Key study

Aluminum oxide in vivo (Rabbit): Not irritant Experimental result, Key study

Iron oxide in vivo (Rabbit): Not irritant Experimental result, Weight of Evidence study



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Serious Eye Damage/Eye Irritation

Product: No data available.

Specified substance(s):

Aluminum hydroxide Rabbit, 24 hrs: Not irritating

Calcium carbonate Rabbit, 24 - 72 hrs: Not irritating

Titanium dioxide Rabbit, 24 hrs: Not irritating

Zinc oxide Rabbit, 24 - 72 hrs: Not irritating

Dibutyl tin dilaurate Rabbit, 24 hrs: Highly irritating

Stearic acid Rabbit, 27 - 72 hrs: Not irritating

Carbon Black Rabbit, 24 - 72 hrs: Not irritating

Hydrotreated heavy

naphthenic distillate

Rabbit, 24 hrs: Not irritating

Aluminum oxide Rabbit, 24 hrs: Not irritating

Respiratory or Skin Sensitization

Product: May cause allergy or asthma symptoms or breathing difficulties if inhaled.

May cause sensitization by inhalation.

Carcinogenicity

Product: No data available.

IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:

Carbon Black Overall evaluation: Possibly carcinogenic to humans.

Hydrotreated heavy Overall evaluation: Not classifiable as to carcinogenicity to humans. Overall

naphthenic distillate evaluation: Carcinogenic to humans.

US. National Toxicology Program (NTP) Report on Carcinogens:

Hydrotreated heavy Known To Be Human Carcinogen.

naphthenic distillate

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050):

Polyvinyl chloride

Cancer



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Germ Cell Mutagenicity

In vitro

Product: No data available.

In vivo

Product: No data available.

Reproductive toxicity

Product: No data available.

Specific Target Organ Toxicity - Single Exposure
Product:
No data available.

Specific Target Organ Toxicity - Repeated Exposure
Product:
No data available.

Aspiration Hazard

Product: No data available.

Other effects: No data available.

12. Ecological information

Ecotoxicity:

Acute hazards to the aquatic environment:

Fish

Product: No data available.

Specified substance(s):

Zinc oxide LC 50 (Fathead minnow (Pimephales promelas), 96 h): 2,246 mg/l Mortality

Dibutyl tin dilaurate LC 50 (Ide, silver or golden orfe (Leuciscus idus), 48 h): 2 mg/l Mortality

Aquatic Invertebrates

Product: No data available.

Specified substance(s):

Titanium dioxide EC 50 (Water flea (Daphnia magna), 48 h): > 1,000 mg/l Intoxication

Dibutyl tin dilaurate EC 50 (Water flea (Daphnia magna), 24 h): 0.66 mg/l Intoxication

Chronic hazards to the aquatic environment:



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Fish

Product: No data available.

Specified substance(s):

Hydrotreated heavy NOAEL (Oncorhynchus mykiss, 14 d): >= 1,000 mg/l QSAR QSAR,

naphthenic distillate Supporting study

Aquatic Invertebrates

Product: No data available.

Toxicity to Aquatic Plants

Product: No data available.

Persistence and Degradability

Biodegradation

Product: No data available.

BOD/COD Ratio

Product: No data available.

Bioaccumulative potential

Bioconcentration Factor (BCF)

Product: No data available.

Partition Coefficient n-octanol / water (log Kow)

Product: No data available.

Specified substance(s):

Dibutyl tin dilaurate Log Kow: 3.12

Stearic acid Log Kow: 8.23

Mobility in soil: No data available.

Other adverse effects: Toxic to aquatic organisms.

13. Disposal considerations

Disposal instructions: Dispose of waste at an appropriate treatment and disposal facility in

accordance with applicable laws and regulations, and product

characteristics at time of disposal.

Contaminated Packaging: No data available.

14. Transport information

TDG:

14/19



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Not Regulated

CFR / DOT:

Not Regulated

IMDG:

Not Regulated

15. Regulatory information

US Federal Regulations

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

None present or none present in regulated quantities.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Chemical Identity OSHA hazard(s)

Polyvinyl chloride Blood

Liver Cancer Flammability

Central nervous system

CERCLA Hazardous Substance List (40 CFR 302.4):

Chemical Identity Reportable quantity

bis (2-chloro- 1000 lbs.

1methylethyl) ether

Barium sulfate 1000 lbs.
Propylene oxide 100 lbs.
Propionic acid 5000 lbs.
Ethylbenzene 1000 lbs.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories

Propylene oxide

Immediate (Acute) Health Hazards Delayed (Chronic) Health Hazard

SARA 302 Extremely Hazardous Substance

Reportable

100 lbs.

Chemical IdentityquantityThreshold Planning QuantityIsophorone Diisocyanate500 lbs.

10000 lbs.



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SARA 304 Emergency Release Notification

Chemical Identity Reportable quantity

Isophorone Diisocyanate Diisodecyl phthalate

Zinc oxide

Copper phthalocyanine Diisodecyl phthalate

(mixed Is)

bis (2-chloro- 1000 lbs.

1methylethyl) ether

Barium sulfate 1000 lbs.
Propylene oxide 100 lbs.
Propionic acid 5000 lbs.
Ethylbenzene 1000 lbs.

SARA 311/312 Hazardous Chemical

Chemical Identity	Threshold Planning Quantity
Isophorone Diisocyanate	500lbs
Propylene oxide	500lbs
Aluminum hydroxide	10000 lbs
Calcium carbonate	10000 lbs
Polyvinyl chloride	10000 lbs
Titanium dioxide	10000 lbs
Zinc oxide	10000 lbs
Calcium oxide	10000 lbs
Dibutyl tin dilaurate	10000 lbs
Stearic acid	10000 lbs
Carbon Black	10000 lbs
Hydrotreated heavy	10000 lbs
naphthenic distillate	
Aluminum oxide	10000 lbs
Iron oxide	10000 lbs

SARA 313 (TRI Reporting)

Chemical Identity

Isophorone Diisocyanate

Zinc oxide

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Chemical Identity Reportable quantity

Propylene oxide lbs

Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3)

None present or none present in regulated quantities.

US State Regulations

US. California Proposition 65



WARNING

Cancer and Reproductive Harm - www.P65Warnings.ca.gov



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

Chemical Identity

Calcium carbonate

Polyvinyl chloride

Titanium dioxide

Isophorone Diisocyanate

Zinc oxide

Calcium oxide

Carbon Black

Hydrotreated heavy naphthenic distillate

US. Massachusetts RTK - Substance List

Chemical Identity

Calcium carbonate

Titanium dioxide

Isophorone Diisocyanate

Zinc oxide

Calcium oxide

Propylene oxide

Crystalline Silica (Quartz)/ Silica Sand

US. Pennsylvania RTK - Hazardous Substances

Chemical Identity

Calcium carbonate

Titanium dioxide

Isophorone Diisocyanate

Diisodecyl phthalate

Zinc oxide

Calcium oxide

US. Rhode Island RTK

Chemical Identity

Aluminum hydroxide

Calcium carbonate

Polyvinyl chloride

Titanium dioxide

Isophorone Diisocyanate

Zinc oxide

Calcium oxide

International regulations

Montreal protocol

Not applicable

Stockholm convention

Not applicable

Rotterdam convention

Not applicable

Kyoto protocol

Not applicable



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VOC:

Regulatory VOC (less water and : 30 g/l

exempt solvent)
VOC Method 310

: 2.04 %

Inventory Status:

Australia AICS: One or more components in this product are

not listed on or exempt from the Inventory.

Canada DSL Inventory List:

One or more components in this product are

not listed on or exempt from the Inventory.

EINECS, ELINCS or NLP: One or more components in this product are

not listed on or exempt from the Inventory.

Japan (ENCS) List: One or more components in this product are

not listed on or exempt from the Inventory.

China Inv. Existing Chemical Substances:

One or more components in this product are

not listed on or exempt from the Inventory.

Korea Existing Chemicals Inv. (KECI): One or more components in this product are

not listed on or exempt from the Inventory.

Canada NDSL Inventory:

One or more components in this product are

not listed on or exempt from the Inventory.

Philippines PICCS: One or more components in this product are

not listed on or exempt from the Inventory.

US TSCA Inventory:

One or more components in this product are

not listed on or exempt from the Inventory.

New Zealand Inventory of Chemicals:

One or more components in this product are

not listed on or exempt from the Inventory.

Japan ISHL Listing:

One or more components in this product are

not listed on or exempt from the Inventory.

Japan Pharmacopoeia Listing:

One or more components in this product are

not listed on or exempt from the inventory.



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16.Other information, including date of preparation or last revision

Revision Date: 10/12/2018

Version #: 1.1

Further Information: No data available.

Disclaimer: For Industrial Use Only. Keep out of Reach of Children. The hazard

information herein is offered solely for the consideration of the user, subject to their own investigation of compliance with applicable regulations, including

the safe use of the product under every foreseeable condition.