

Version: 1.0 Revision Date: 03/28/2016

SAFETY DATA SHEET

1. Identification

Material name: VULKEM 116 LV DARK BRONZE 30 CTG/CS Material: 426721L 323

Recommended use and restriction on use

Recommended use: Sealant Restrictions on use: Not known.

Manufacturer/Importer/Supplier/Distributor Information

Tremco U.S Sealants 3735 Green Road Beachwood OH 44122 US

Contact person: Telephone: Emergency telephone number:

EH&S Department 216-292-5000 1-800-424-9300 (US); 1-613-996-6666 (Canada)

2. Hazard(s) identification

Hazard Classification

Hea	alth Hazards	
	Acute toxicity (Inhalation - vapor)	Category 4
I	Respiratory sensitizer	Category 1
;	Skin sensitizer	Category 1
(Germ Cell Mutagenicity	Category 1B
(Carcinogenicity	Category 1A
Unknow	wn toxicity - Health	
	Acute toxicity, oral	37.49 %
	Acute toxicity, dermal	41.27 %
	Acute toxicity, inhalation, vapor	97.34 %
1	Acute toxicity, inhalation, dust or mist	99.16 %
Environm	ental Hazards	
	Acute hazards to the aquatic environment	Category 2
Unknow	wn toxicity - Environment	
	Acute hazards to the aquatic environment	78.56 %
	Chronic hazards to the aquatic environment	100 %

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 genetic defects. May cause cancer. Toxic to aquatic life.
Precautionary Statement:	
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 must 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. Avoid release to the environment.
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 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.
Other hazards which do not result in GHS classification:	None.

3. Composition/information on ingredients

Mixtures

Chemical Identity	CAS number	Content in percent (%)*
Calcium Carbonate (Limestone)	1317-65-3	15 - 40%
Polyethylene	9002-88-4	3 - 7%
Heavy aromatic naphtha	64742-94-5	1 - 5%
Aromatic petroleum distillates	64742-95-6	1 - 5%
1,2,4-Trimethylbenzene	95-63-6	0.5 - 1.5%
4,4'-Methylene bis(phenylisocyanate)	101-68-8	0.5 - 1.5%



Carbon Black	1333-86-4	0.1 - 1%
Polymethylene polyphenyl isocyanate	9016-87-9	0.1 - 1%
1,3,5-Trimethylbenzene	108-67-8	0.1 - 1%
Crystalline Silica (Quartz)/ Silica Sand	14808-60-7	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/effect	ts, acute and delayed	
Symptoms:	May cause skin and eye irritation.	
Indication of immediate medical a	attention and special treatment needed	
Treatment:	Symptoms may be delayed.	
5. Fire-fighting measures		
5. Fire-fighting measures General Fire Hazards:	No unusual fire or explosion hazards noted.	
General Fire Hazards:		
General Fire Hazards: Suitable (and unsuitable) e Suitable extinguishing	xtinguishing media	
General Fire Hazards: Suitable (and unsuitable) e Suitable extinguishing media: Unsuitable extinguishing	xtinguishing media Use fire-extinguishing media appropriate for surrounding materials.	
General Fire Hazards: Suitable (and unsuitable) e Suitable extinguishing media: Unsuitable extinguishing media: Specific hazards arising from	xtinguishing media Use fire-extinguishing media appropriate for surrounding materials. Do not use water jet as an extinguisher, as this will spread the fire. During fire, gases hazardous to health may be formed.	



Special protective equipment for fire-fighters:	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.	
6. Accidental release measure	s	
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:	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. Ventilate well, avoid breathing vapors. Use approved respirator if air contamination is above accepted level. Use mechanical ventilation in case of handling which causes formation of dust.	
Conditions for safe storage, including any incompatibilities:	Store locked up.	

8. Exposure controls/personal protection

Control Parameters

Occupational Exposure Limits

Chemical Identity	type	Exposure Limit Values	Source
Calcium Carbonate (Limestone) - Total dust.	PEL	15 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
Calcium Carbonate (Limestone) - Respirable fraction.	PEL	5 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
Polyethylene - Inhalable particles.	TWA	10 mg/m3	US. ACGIH Threshold Limit Values (03 2015)
Polyethylene - Respirable particles.	TWA	3 mg/m3	US. ACGIH Threshold Limit Values (03 2015)
Polyethylene - Respirable fraction.	PEL	5 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)



Polyethylene - Total	PEL		15 mg/m3	US. OSHA Table Z-1 Limits for Air
dust.			10 mg/mo	Contaminants (29 CFR 1910.1000)
				(02 2006)
	TWA		15 mg/m3	US. OSHA Table Z-3 (29 CFR 1910.1000) (2000)
	TWA		50 millions	US. OSHA Table Z-3 (29 CFR
			of particles	1910.1000) (2000)
			per cubic	
			foot of air	
Polyethylene - Respirable fraction.	TWA		5 mg/m3	US. OSHA Table Z-3 (29 CFR 1910.1000) (2000)
	TWA		15 millions	US. OSHA Table Z-3 (29 CFR
			of particles	1910.1000) (2000)
			per cubic	
Lleour cromotio	TWA		foot of air	US. ACGIH Threshold Limit Values
Heavy aromatic naphtha - Non-aerosol. - as total hydrocarbon vapor	TVVA		200 mg/m3	(03 2014)
Heavy aromatic	PEL	100 ppm	400	US. OSHA Table Z-1 Limits for Air
naphtha			mg/m3	Contaminants (29 CFR 1910.1000) (02 2006)
1,2,4-Trimethylbenzene	TWA	25 ppm		US. ACGIH Threshold Limit Values (2011)
4,4'-Methylene bis(phenylisocyanate)	TWA	0.005 ppm		US. ACGIH Threshold Limit Values (2011)
	Ceiling	0.02 ppm	0.2 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
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)
Polymethylene polyphenyl isocyanate	TWA	0.005 ppm		US. ACGIH Threshold Limit Values (2011)
	Ceiling	0.02 ppm	0.2 mg/m3	US. OSHA Table Z-1 Limits for Air
	Cening	0.0 – pp	og,o	Contaminants (29 CFR 1910.1000) (02 2006)
1,3,5-Trimethylbenzene	TWA	25 ppm		US. ACGIH Threshold Limit Values (2011)
Crystalline Silica (Quartz)/ Silica Sand - Respirable fraction.	TWA		0.025 mg/m3	US. ACGIH Threshold Limit Values (2011)
Crystalline Silica (Quartz)/ Silica Sand - Respirable.	TWA		2.4 millions of particles per cubic foot of air	US. OSHA Table Z-3 (29 CFR 1910.1000) (2000)
	TWA		0.1 mg/m3	US. OSHA Table Z-3 (29 CFR 1910.1000) (2000)
Crystalline Silica (Quartz)/ Silica Sand - Total dust.	TWA		0.3 mg/m3	US. OSHA Table Z-3 (29 CFR 1910.1000) (2000)
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)

Chemical name	type	Exposure Limit Values	Source
Diisodecyl phthalate	TWAEV	5 mg/m3	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)
Calcium Carbonate (Limestone) - 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)
	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 (Limestone) - 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 (Limestone) - Total dust.	TWA		10 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (12 2008)
Polyethylene - 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)
Polyethylene - 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)
Polyethylene - Respirable particles.	TWAEV		3 mg/m3	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)
Polyethylene - Inhalable	TWAEV		10 mg/m3	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)
Polyethylene - Total dust.	TWA		10 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (11 2011)
Heavy aromatic naphtha - Non-aerosol. - as total hydrocarbon vapor	TWA		200 mg/m3	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (05 2013)
Heavy aromatic naphtha - Non-aerosol. - as total hydrocarbon vapor	TWAEV		200 mg/m3	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)
Heavy aromatic naphtha	TWA	400 ppm	1,590 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (11 2011)
1,2,4-Trimethylbenzene	TWA	25 ppm		Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
1,2,4-Trimethylbenzene	TWAEV	25 ppm		Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)
1,2,4-Trimethylbenzene	TWA	25 ppm	123 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (12 2008)
4,4'-Methylene	CEILING	0.01 ppm		Canada. British Columbia OELs.



bis(phenylisocyanate)				(Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
	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)
4,4'-Methylene bis(phenylisocyanate)	TWAEV	0.005 ppm		Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)
	CEV	0.02 ppm		Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)
4,4'-Methylene bis(phenylisocyanate)	TWA	0.005 ppm	0.051 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (12 2008)
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	TWAEV		3.5 mg/m3	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)
Carbon Black	TWA		3.5 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (12 2008)
Polymethylene polyphenyl isocyanate	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)
	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)
Polymethylene polyphenyl isocyanate	TWAEV	0.005 ppm		Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)
	CEV	0.02 ppm		Canada. Ontario OELs. (Control of



				Exposure to Biological or Chemical Agents) (11 2010)
Polymethylene polyphenyl isocyanate	TWA	0.005 ppm	0.051 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (12 2008)
1,3,5-Trimethylbenzene	TWA	25 ppm		Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
1,3,5-Trimethylbenzene	TWAEV	25 ppm		Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)
1,3,5-Trimethylbenzene	TWA	25 ppm	123 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (12 2008)
Crystalline Silica (Quartz)/ Silica Sand - Respirable fraction.	TWA		0.025 mg/m3	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
Crystalline Silica (Quartz)/ Silica Sand - Respirable.	TWAEV		0.10 mg/m3	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)
Crystalline Silica (Quartz)/ Silica Sand - Respirable dust.	TWA	0	.1 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (12 2008)

Appropriate Engineering Controls

Mechanical ventilation or local exhaust ventilation may be required. Observe good industrial hygiene practices. Observe occupational exposure limits and minimize the risk of inhalation of dust.

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: solid Form: Paste Color: Dark brown Odor: Mild **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: 99 °C 210 °F(ISO 3679 (seta closed)) **Evaporation rate:** Slower than n-Butyl Acetate Flammability (solid, gas): No Upper/lower limit on flammability or explosive limits No data available. Flammability limit - upper (%): Flammability limit - lower (%): No data available. No data available. Explosive limit - upper (%): No data available. Explosive limit - lower (%): Vapor pressure: No data available. Vapor density: Vapors are heavier than air and may travel along the floor and in the bottom of containers. **Relative density:** 1.16 Solubility(ies) Solubility in water: Insoluble in water Solubility (other): No data available. Partition coefficient (n-octanol/water): No data available. No data available. Auto-ignition temperature: **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. Avoid contact with oxidizing agents (e.g. nitric acid, peroxides and chromates). 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 exp Ingestion:	May be ingested by accident. Ingestion may cause irritation and malaise.		
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.		
Information on toxicological effe	cts		
Acute toxicity (list all possible	routes of exposure)		
Oral Product:	ATEmix: 16,365.91 mg/kg		
Dermal Product:	ATEmix: 17,474.23 mg/kg		
Inhalation Product:	ATEmix: 17.97 mg/l		
Repeated dose toxicity Product:	No data available.		
Skin Corrosion/Irritation Product:	No data available.		
Specified substance(s): Heavy aromatic naphtha	in vivo (Rabbit): Experimental result, Key study		
Aromatic petroleum distillates	in vivo (Rabbit): Experimental result, Key study		
1,2,4-Trimethylbenzene	in vivo (Rabbit): Read-across from supporting substance (structural analogue or surrogate), Key study		



	4,4'-Methylene bis(phenylisocyanate)	in vivo (Rabbit): Read-across based on grouping of substances (category approach), Key study		
	Carbon Black	in vivo (Rabbit): Experimental result, Key study		
	1,3,5-Trimethylbenzene	in vivo (Rabbit): Experimental result, Key study		
	Iron oxide	in vivo (Rabbit): Experimental result, Weight of Evidence study		
Serious Eye Damage/Eye Irritation Product: No data available.				
S	pecified substance(s): Heavy aromatic naphtha	in vivo (Rabbit, 24 - 72 hrs): Not irritating		
	Aromatic petroleum distillates	in vivo (Rabbit, 24 - 72 hrs): Not irritating		
	1,2,4-Trimethylbenzene	in vivo (Rabbit, 30 min): Not irritating		
	4,4'-Methylene bis(phenylisocyanate)	in vivo (Rabbit, 24 - 72 hrs): Not irritating		
	Carbon Black	in vivo (Rabbit, 24 - 72 hrs): Not irritating		
	Iron oxide	in vivo (Rabbit, 1 - 72 hrs): Not irritating		
Respiratory or Skin Sensitization Product:		 n 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.		
	Crystalline Silica (Quartz)/ Silica Sand	Overall evaluation: Carcinogenic to humans.		
US. National Toxicology Program (NTP) Report on Carcinogens: Crystalline Silica Known To Be Human Carcinogen. (Quartz)/ Silica Sand				



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

No data available.

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
Product:Single Exposure
No data available.Specific Target Organ Toxicity
Product:Repeated Exposure
No data available.Aspiration Hazard
Product:No data available.
- Other effects:

12. Ecological information

Ecotoxicity:

Acute hazards to the aquatic environment:

No data available.
LC 50 (Fathead minnow (Pimephales promelas), 96 h): 7.19 - 8.28 mg/l Mortality
LC 50 (Goldfish (Carassius auratus), 96 h): 9.89 - 15.05 mg/l Mortality
No data available.
LC 50 (Scud (Elasmopus pectinicrus), 24 h): 4.89 - 5.62 mg/l Mortality
EC 50 (Water flea (Daphnia magna), 24 h): 50 mg/l Intoxication

Chronic hazards to the aquatic environment:



Fish Product:	No data available.
Specified substance(s): Heavy aromatic naphtha	NOAEL (Oncorhynchus mykiss, 28 d): 0.098 mg/l QSAR QSAR, Key study
Aromatic petroleum distillates	LL 50 (Pimephales promelas, 14 d): 5.2 mg/l Experimental result, Supporting study EC 50 (Daphnia magna, 21 d): 10 mg/l Other, Key study NOAEL (Pimephales promelas, 14 d): 2.6 mg/l Experimental result, Supporting study NOAEL (Daphnia magna, 21 d): 2.6 mg/l Other, Key study
Carbon Black	NOAEL (Salmo sp., 30 d): 17 mg/l QSAR QSAR, Key study
Iron oxide	LOAEL (Salvelinus fontinalis, 35 Weeks): 12 mg/l Experimental result, Supporting study NOAEL (Salvelinus fontinalis, 35 Weeks): 6 mg/l Experimental result, Supporting study NOAEL (Pimephales promelas, 33 d): 1 mg/l Experimental result, Supporting study LOAEL (Pimephales promelas, 12 Months): 1.5 mg/l Experimental result, Supporting study NOAEL (Pimephales promelas, 33 d): 1.6 mg/l Experimental result, 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 (BC Product:	CF) No data available.
Partition Coefficient n-octan Product:	Iol / water (log Kow) No data available.
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:

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)

Chemical Identity	Reportable quantity	
P-chlorobenzotrifluoride	De minimis concentration:	1.0% One-Time Export Notification only.

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
4,4'-Methylene	5000 lbs.
bis(phenylisocyanate)	
Polymethylene	5000 lbs.
polyphenyl isocyanate	
Barium sulfate	1000 lbs.
Cumene	5000 lbs.
2,4-Toluene diisocyanate	100 lbs.
Xylene	100 lbs.
Toluene-2,6-Diisocyanate	100 lbs.
Ethylbenzene	1000 lbs.
Chromium	5000 lbs.



Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories

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

SARA 302 Extremely Hazardous Substance

	Reportable			
Chemical Identity	quantity	Threshold Planning Quantity		
2,4-Toluene diisocyanate	100 lbs.	500 lbs.		
Toluene-2,6-Diisocyanate	100 lbs.	100 lbs.		

SARA 304 Emergency Release Notification Chemical Identity Reportable quantity

Chemical Identity	Reportable (
Diisodecyl phthalate	
4,4'-Methylene	5000 lbs.
bis(phenylisocyanate)	
Polymethylene	5000 lbs.
polyphenyl isocyanate	
Barium sulfate	1000 lbs.
Cumene	5000 lbs.
2,4-Toluene diisocyanate	100 lbs.
Xylene	100 lbs.
Toluene-2,6-Diisocyanate	100 lbs.
Ethylbenzene	1000 lbs.
Chromium	5000 lbs.

SARA 311/312 Hazardous Chemical

2,4-Toluene diisocyanate500lbsToluene-2,6-Diisocyanate100lbsCalcium Carbonate500 lbs(Limestone)500 lbsPolyethylene500 lbsHeavy aromatic naphtha500 lbsAromatic petroleum500 lbsdistillates1,2,4-Trimethylbenzene1,2,4-Trimethylbenzene500 lbsbis(phenylisocyanate)500 lbsCarbon Black500 lbsPolymethylene polyphenyl500 lbsisocyanate1,3,5-Trimethylbenzene500 lbs500 lbsSilica Sand500 lbs	Chemical Identity	Threshold Planning Quantity
Calcium Carbonate500 lbs(Limestone)FolyethylenePolyethylene500 lbsHeavy aromatic naphtha500 lbsAromatic petroleum500 lbsdistillates1,2,4-Trimethylbenzene1,2,4-Trimethylbenzene500 lbsbis(phenylisocyanate)500 lbsCarbon Black500 lbsPolymethylene polyphenyl500 lbsisocyanate500 lbs1,3,5-Trimethylbenzene500 lbsCrystalline Silica (Quartz)/500 lbsSilica Sand500 lbs	2,4-Toluene diisocyanate	500lbs
(Limestone)Polyethylene500 lbsHeavy aromatic naphtha500 lbsAromatic petroleum500 lbsdistillates1,2,4-Trimethylbenzene1,2,4-Trimethylbenzene500 lbsbis(phenylisocyanate)500 lbsCarbon Black500 lbsPolymethylene polyphenyl500 lbsisocyanate1,3,5-Trimethylbenzene1,3,5-Trimethylbenzene500 lbsCrystalline Silica (Quartz)/500 lbs	Toluene-2,6-Diisocyanate	100lbs
Polyethylene500 lbsHeavy aromatic naphtha500 lbsAromatic petroleum500 lbsdistillates1,2,4-Trimethylbenzene1,2,4-Trimethylbenzene500 lbs4,4'-Methylene500 lbsbis(phenylisocyanate)500 lbsCarbon Black500 lbsPolymethylene polyphenyl500 lbsisocyanate500 lbs1,3,5-Trimethylbenzene500 lbsCrystalline Silica (Quartz)/500 lbsSilica Sand500 lbs	Calcium Carbonate	500 lbs
Heavy aromatic naphtha500 lbsAromatic petroleum500 lbsdistillates500 lbs1,2,4-Trimethylbenzene500 lbs4,4'-Methylene500 lbsbis(phenylisocyanate)500 lbsCarbon Black500 lbsPolymethylene polyphenyl500 lbsisocyanate500 lbs1,3,5-Trimethylbenzene500 lbsCrystalline Silica (Quartz)/500 lbsSilica Sand500 lbs	(Limestone)	
Aromatic petroleum500 lbsdistillates1,2,4-Trimethylbenzene500 lbs1,2,4-Trimethylbenzene500 lbs4,4'-Methylene500 lbsbis(phenylisocyanate)500 lbsCarbon Black500 lbsPolymethylene polyphenyl500 lbsisocyanate500 lbs1,3,5-Trimethylbenzene500 lbsCrystalline Silica (Quartz)/500 lbsSilica Sand500 lbs	Polyethylene	500 lbs
distillates 1,2,4-Trimethylbenzene 500 lbs 4,4'-Methylene 500 lbs bis(phenylisocyanate) Carbon Black 500 lbs Polymethylene polyphenyl 500 lbs isocyanate 1,3,5-Trimethylbenzene 500 lbs Crystalline Silica (Quartz)/ 500 lbs Silica Sand	Heavy aromatic naphtha	500 lbs
1,2,4-Trimethylbenzene500 lbs4,4'-Methylene500 lbsbis(phenylisocyanate)500 lbsCarbon Black500 lbsPolymethylene polyphenyl500 lbsisocyanate1,3,5-Trimethylbenzene500 lbsCrystalline Silica (Quartz)/500 lbsSilica Sand500 lbs	Aromatic petroleum	500 lbs
4,4'-Methylene500 lbsbis(phenylisocyanate)500 lbsCarbon Black500 lbsPolymethylene polyphenyl500 lbsisocyanate1,3,5-Trimethylbenzene1,3,5-Trimethylbenzene500 lbsCrystalline Silica (Quartz)/500 lbsSilica Sand500 lbs	distillates	
bis(phenylisocyanate) Carbon Black 500 lbs Polymethylene polyphenyl 500 lbs isocyanate 1,3,5-Trimethylbenzene 500 lbs Crystalline Silica (Quartz)/ 500 lbs Silica Sand		500 lbs
Carbon Black500 lbsPolymethylene polyphenyl500 lbsisocyanate1,3,5-TrimethylbenzeneCrystalline Silica (Quartz)/500 lbsSilica Sand500 lbs	4,4'-Methylene	500 lbs
Polymethylene polyphenyl500 lbsisocyanate1,3,5-Trimethylbenzene500 lbsCrystalline Silica (Quartz)/500 lbsSilica Sand500 lbs	bis(phenylisocyanate)	
isocyanate 1,3,5-Trimethylbenzene 500 lbs Crystalline Silica (Quartz)/ 500 lbs Silica Sand	Carbon Black	500 lbs
1,3,5-Trimethylbenzene 500 lbs Crystalline Silica (Quartz)/ 500 lbs Silica Sand	Polymethylene polyphenyl	500 lbs
Crystalline Silica (Quartz)/ 500 lbs Silica Sand	isocyanate	
Silica Sand		500 lbs
	Crystalline Silica (Quartz)/	500 lbs
	Silica Sand	
Iron oxide 500 lbs	Iron oxide	500 lbs

SARA 313 (TRI Reporting)

None present or none present in regulated quantities.

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

Chemical Identity	Reportable quantity
Xylene	100 lbs.



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

Chemical Identity

2,4-Toluene diisocyanate Toluene-2,6-Diisocyanate

Reportable quantity 10000 lbs 10000 lbs

US State Regulations

US. California Proposition 65

This product contains chemical(s) known to the State of California to cause cancer and/or to cause birth defects or other reproductive harm.

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

Chemical Identity

Calcium Carbonate (Limestone) P-chlorobenzotrifluoride Heavy aromatic naphtha Carbon Black Crystalline Silica (Quartz)/ Silica Sand

US. Massachusetts RTK - Substance List

Chemical Identity

Calcium Carbonate (Limestone) Heavy aromatic naphtha Crystalline Silica (Quartz)/ Silica Sand 2,4-Toluene diisocyanate Toluene-2,6-Diisocyanate Chromium

US. Pennsylvania RTK - Hazardous Substances

Chemical Identity

Diisodecyl phthalate Calcium Carbonate (Limestone) Heavy aromatic naphtha

US. Rhode Island RTK

<u>Chemical Identity</u> Diisodecyl phthalate

Other Regulations:

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Regulatory VOC (less water and exempt solvent):	48 g/l	
VOC Method 310:	2.59 %	
Inventory Status: Australia AICS:		One or more components in this product are not listed on or exempt from the Inventory.
Canada DSL Inventory List:		All components in this product are 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:	All components in this product are 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.

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

Revision Date:	03/28/2016
Version #:	1.0
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.