



SAFETY DATA SHEET

1. Identification

Material name: VULKEM 116 LV GRAY 30 CTG/CS Material: 426712L 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)

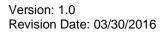
2. Hazard(s) identification

Hazard Classification

Health Hazards	
Respiratory sensitizer	Category 1
Skin sensitizer	Category 1
Germ Cell Mutagenicity	Category 1B
Carcinogenicity	Category 1A
Unknown toxicity - Health	
Acute toxicity, oral	34.06 %
Acute toxicity, dermal	41.27 %
Acute toxicity, inhalation, vapor	97.73 %
Acute toxicity, inhalation, dust or mist	99.12 %
Environmental Hazards	
Acute hazards to the aquatic	Category 2
environment	
Unknown toxicity - Environment	
Acute hazards to the aquatic environment	78.43 %
Chronic hazards to the aquatic	100 %
environment	

Label Elements

Hazard Symbol:





Signal Word:	Danger
Hazard Statement:	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. [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: If breathing is difficult, 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. If exposed or concerned: Get medical advice/attention. 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	10 - 30%
Titanium dioxide	13463-67-7	3 - 7%
Polyethylene	9002-88-4	3 - 7%
Heavy aromatic naphtha	64742-94-5	1 - 5%
Aromatic petroleum distillates	64742-95-6	0.5 - 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%



Aluminum oxide	1344-28-1	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%

* 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/effec	ts, 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) e	extinguishing media		
Suitable extinguishing media:	Use fire-extinguishing media appropriate for surrounding materials.		
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 a	nd 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 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	Store locked up.	

8. Exposure controls/personal protection

Control Parameters

incompatibilities:

Occupational Exposure Limits

Chemical Identity	type	Exposure Limit Values	Source
Calcium Carbonate	PEL	15 mg/m3	US. OSHA Table Z-1 Limits for Air
(Limestone) - Total dust.			Contaminants (29 CFR 1910.1000) (02 2006)
Calcium Carbonate	PEL	5 mg/m3	US. OSHA Table Z-1 Limits for Air
(Limestone) - Respirable fraction.			Contaminants (29 CFR 1910.1000) (02 2006)
Titanium dioxide	TWA	10 mg/m3	US. ACGIH Threshold Limit Values (2011)
Titanium dioxide - Total	PEL	15 mg/m3	US. OSHA Table Z-1 Limits for Air
dust.			Contaminants (29 CFR 1910.1000) (02 2006)
Polyethylene -	TWA	10 mg/m3	US. ACGIH Threshold Limit Values
Inhalable particles.			(03 2015)
Polyethylene -	TWA	3 mg/m3	US. ACGIH Threshold Limit Values



Respirable particles.				(03 2015)
Polyethylene -	PEL		5 mg/m3	US. OSHA Table Z-1 Limits for Air
Respirable fraction.				Contaminants (29 CFR 1910.1000) (02 2006)
Polyethylene - Total	PEL		15 mg/m3	US. OSHA Table Z-1 Limits for Air
dust.			C C	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	
11	T\A/A		foot of air	
Heavy aromatic naphtha - Non-aerosol.	TWA		200	US. ACGIH Threshold Limit Values (03 2014)
- as total hydrocarbon			mg/m3	(03 2014)
vapor				
Heavy aromatic	PEL	100 ppm	400	US. OSHA Table Z-1 Limits for Air
naphtha			mg/m3	Contaminants (29 CFR 1910.1000)
·			0	(02 2006)
1,2,4-Trimethylbenzene	TWA	25 ppm		US. ACGIH Threshold Limit Values
4,4'-Methylene	TWA	0.005 ppm		(2011) US. ACGIH Threshold Limit Values
bis(phenylisocyanate)	IVVA	0.005 ppm		(2011)
bio(prioriyiloooyariato)	Coiling	0.02 ppm	0.2 mg/m3	US. OSHA Table Z-1 Limits for Air
	Ceiling	•••	sg,s	Contaminants (29 CFR 1910.1000)
				(02 2006)
Aluminum oxide - Respirable fraction.	TWA		1 mg/m3	US. ACGIH Threshold Limit Values (2011)
	DEL		5 mg/m3	US. OSHA Table Z-1 Limits for Air
	PEL		o mg/mo	Contaminants (29 CFR 1910.1000)
				(02 2006)
Aluminum oxide - Total	PEL		15 mg/m3	US. OSHA Table Z-1 Limits for Air
dust.			-	Contaminants (29 CFR 1910.1000)
				(02 2006)
Polymethylene	TWA	0.005 ppm		US. ACGIH Threshold Limit Values
polyphenyl isocyanate	0	0.02 ppm	0.2 mg/m3	(2011) US. OSHA Table Z-1 Limits for Air
	Ceiling	0.02 ppm	o.∠ my/mo	Contaminants (29 CFR 1910.1000)
				(02 2006)
1,3,5-Trimethylbenzene	TWA	25 ppm		US. ACGIH Threshold Limit Values
· · ·				(2011)
Crystalline Silica	TWA		0.025	US. ACGIH Threshold Limit Values
(Quartz)/ Silica Sand -			mg/m3	(2011)
Respirable fraction.				
Crystalline Silica	TWA		2.4	US. OSHA Table Z-3 (29 CFR
(Quartz)/ Silica Sand -			millions of	1910.1000) (2000)
Respirable.			particles per cubic	
			foot of air	
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	TWA	0.1 mg/m3	US. OSHA Table Z-3 (29 CFR
			1910.1000) (2000)
Crystalline Silica	TWA	0.3 mg/m3	US. OSHA Table Z-3 (29 CFR
(Quartz)/ Silica Sand -			1910.1000) (2000)
Total dust.			

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)
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	TWAEV	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) (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 bis(phenylisocyanate)	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)
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)
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,



	1			
Polymethylene polyphenyl isocyanate	TWAEV	0.005 ppm		as amended) (07 2007) 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	().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:	Gray
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 explos	ive 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:	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.
Auto-ignition temperature:	No data available.
Decomposition temperature:	No data available.
Viscosity:	No data available.
10 Stability and reactivity	

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 exposure

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 effects

Acute toxicity (list all possible routes of exposure)

Oral Product:	ATEmix: 11,435.4 mg/kg	
Dermal Product:	ATEmix: 21,029.43 mg/kg	
Inhalation Product:	No data available.	
Repeated dose toxicity Product:	No data available.	
Skin Corrosion/Irritation Product:	No data available.	
Specified substance(s): Titanium dioxide	in vivo (Rabbit): Experimental result, Supporting study	



	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
	Aluminum oxide	in vivo (Rabbit): Experimental result, Key study
	1,3,5-Trimethylbenzene	in vivo (Rabbit): Experimental result, Key study
Serious Eye Damage/Eye Irritation Product: No data available.		
Р		
Р	roduct: pecified substance(s):	No data available.
Р	roduct: pecified substance(s): Titanium dioxide Heavy aromatic	No data available. in vivo (Rabbit, 24 hrs): Not irritating
Р	roduct: pecified substance(s): Titanium dioxide Heavy aromatic naphtha Aromatic petroleum	No data available. in vivo (Rabbit, 24 hrs): Not irritating in vivo (Rabbit, 24 - 72 hrs): Not irritating
Р	roduct: pecified substance(s): Titanium dioxide Heavy aromatic naphtha Aromatic petroleum distillates	No data available. in vivo (Rabbit, 24 hrs): Not irritating in vivo (Rabbit, 24 - 72 hrs): Not irritating in vivo (Rabbit, 24 - 72 hrs): Not irritating
Р	roduct: pecified substance(s): Titanium dioxide Heavy aromatic naphtha Aromatic petroleum distillates 1,2,4-Trimethylbenzene 4,4'-Methylene	No data available. in vivo (Rabbit, 24 hrs): Not irritating in vivo (Rabbit, 24 - 72 hrs): Not irritating in vivo (Rabbit, 24 - 72 hrs): Not irritating in vivo (Rabbit, 30 min): Not irritating
P S Respira	roduct: pecified substance(s): Titanium dioxide Heavy aromatic naphtha Aromatic petroleum distillates 1,2,4-Trimethylbenzene 4,4'-Methylene bis(phenylisocyanate)	No data available. in vivo (Rabbit, 24 hrs): Not irritating in vivo (Rabbit, 24 - 72 hrs): Not irritating in vivo (Rabbit, 24 - 72 hrs): Not irritating in vivo (Rabbit, 30 min): Not irritating in vivo (Rabbit, 24 - 72 hrs): Not irritating in vivo (Rabbit, 24 hrs): Not irritating



IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:

Titanium dioxide Overall evaluation: Possibly carcinogenic to humans.

Crystalline Silica Overall evaluation: Carcinogenic to humans. (Quartz)/ Silica Sand

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

Germ Cell Mutagenicity

In vitro Product:	No data available.
In vivo Product:	No data available.
Reproductive toxicity Product:	No data available.
Specific Target Organ Toxicit Product:	y - Single Exposure No data available.
Specific Target Organ Toxicit Product:	y - Repeated Exposure 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):



1,2,4-Trimethylbenzene	LC 50 (Fathead minnow (Pimephales promelas), 96 h): 7.19 - 8.28 mg/l Mortality	
1,3,5-Trimethylbenzene	LC 50 (Goldfish (Carassius auratus), 96 h): 9.89 - 15.05 mg/l Mortality	
Aquatic Invertebrates Product:	No data available.	
Specified substance(s): 1,2,4-Trimethylbenzene	LC 50 (Scud (Elasmopus pectinicrus), 24 h): 4.89 - 5.62 mg/l Mortality	
1,3,5-Trimethylbenzene	EC 50 (Water flea (Daphnia magna), 24 h): 50 mg/l Intoxication	
Chronic hazards to the aquation	c environment:	
Fish Product:	No data available.	
Specified substance(s): Titanium dioxide	ED 0 (Phoxinus phoxinus, 30 d): >= 1,000 mg/l Experimental result, Supporting study LC 10 (Oncorhynchus mykiss, 28 d): 0.981 mg/l Read-across from supporting substance (structural analogue or surrogate), Supporting study LC 50 (Oncorhynchus mykiss, 28 d): 7.31 mg/l Read-across from supporting substance (structural analogue or surrogate), Supporting study LC 1 (Oncorhynchus mykiss, 28 d): 0.191 mg/l Read-across from supporting substance (structural analogue or surrogate), Supporting study LC 1 (Oncorhynchus mykiss, 28 d): 0.191 mg/l Read-across from supporting substance (structural analogue or surrogate), Supporting study LC 0 (Coregonus autumnalis migratorius G., 30 d): 3 mg/l Experimental result, Supporting study	
Heavy aromatic naphtha	NOAEL (Oncorhynchus mykiss, 28 d): 0.098 mg/I 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	
Aluminum oxide	NOAEL (Pimephales promelas, 28 d): 4.7 mg/l Experimental result, Weight of Evidence study IC 25 (Pimephales promelas, 7 d): 11.59 mg/l Experimental result, Weight of Evidence study LOAEL (Salvelinus fontinalis, 60 d): 0.35 mg/l Experimental result, Weight of Evidence study NOAEL (Pimephales promelas, 7 d): 0.4 mg/l Read-across based on grouping of substances (category approach), Weight of Evidence study NOAEL (Pimephales promelas, 7 d): >= 0.831 mg/l Experimental result, Weight of Evidence 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 (B Product:	CF) No data available.	
Partition Coefficient n-octa Product:	n ol / 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	
2,4-Toluene diisocyanate	100 lbs.
Cumene	5000 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

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

SARA 302 Extremely Hazardous Substance

	<u>Reportable</u>	
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 qua
Diisodecyl phthalate	
4,4'-Methylene	5000 lbs.
bis(phenylisocyanate)	
Polymethylene	5000 lbs.
polyphenyl isocyanate	
2,4-Toluene diisocyanate	100 lbs.
Cumene	5000 lbs.
Xylene	100 lbs.
Toluene-2,6-Diisocyanate	100 lbs.
Ethylbenzene	1000 lbs.
Chromium	5000 lbs.



SARA 311/312 Hazardous Chemical

Chemical Identity	Threshold Planning Quantity
2,4-Toluene diisocyanate	500lbs
Toluene-2,6-Diisocyanate	100lbs
Calcium Carbonate	500 lbs
(Limestone)	
Titanium dioxide	500 lbs
Polyethylene	500 lbs
Heavy aromatic naphtha	500 lbs
Aromatic petroleum	500 lbs
distillates	
1,2,4-Trimethylbenzene	500 lbs
4,4'-Methylene	500 lbs
bis(phenylisocyanate)	
Aluminum oxide	500 lbs
Polymethylene polyphenyl	500 lbs
isocyanate	
1,3,5-Trimethylbenzene	500 lbs
Crystalline Silica (Quartz)/	500 lbs
Silica Sand	

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
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Reportable quantity

2,4-Toluene diisocyanate	10000 lbs
Toluene-2,6-Diisocyanate	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) Titanium dioxide P-chlorobenzotrifluoride Heavy aromatic naphtha Crystalline Silica (Quartz)/ Silica Sand



US. Massachusetts RTK - Substance List

Chemical Identity

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

US. Pennsylvania RTK - Hazardous Substances

Chemical Identity

Diisodecyl phthalate Calcium Carbonate (Limestone) Titanium dioxide Heavy aromatic naphtha

US. Rhode Island RTK

Chemical Identity Diisodecyl phthalate

Other Regulations:

Regulatory VOC (less water	38 g/l
and exempt solvent):	
VOC Method 310:	1.72 %

Inventory Status:

Australia AICS:

Canada DSL Inventory List:

EINECS, ELINCS or NLP:

Japan (ENCS) List:

China Inv. Existing Chemical Substances:

Korea Existing Chemicals Inv. (KECI):

Canada NDSL Inventory:

Philippines PICCS:

One or more components in this product are not listed on or exempt from the Inventory.

All components in this product are listed on or exempt from the Inventory.

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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:	03/30/2016
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.

