

SAFETY DATA SHEET

1. Identification

Material name: GEOGARD LO BASE COAT 5 GAL Material: 491L005P

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: 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
Carcinogenicity	Category 1A

Unknown toxicity - Health

Acute toxicity, oral	51.86 %
Acute toxicity, dermal	54.31 %
Acute toxicity, inhalation, vapor	100 %
Acute toxicity, inhalation, dust or mist	99.62 %

Environmental Hazards

Acute hazards to the aquatic	Category 3
environment	

Unknown toxicity - Environment

Acute hazards to the aquatic environment	97.65 %
Chronic hazards to the aquatic environment	100 %

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 cancer. Harmful to aquatic life.
Precautionary Statements	
Prevention:	Avoid breathing dust/fume/gas/mist/vapors/spray. [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: 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 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 number

Content in percent (%)*



Calcium Carbonate (Limestone)	1317-65-3	30 - 60%
Calcium oxide	1305-78-8	1 - 5%
Titanium dioxide	13463-67-7	1 - 5%
Crystalline Silica (Quartz)/ Silica Sand	14808-60-7	0.1 - 1%
Hydrotreated heavy naphthenic distillate	64742-52-5	0.1 - 1%
Dibutyl tin dilaurate	77-58-7	0.1 - 1%
Tosyl isocyanate	4083-64-1	0.1 - 1%
4,4'-Methylene bis(phenylisocyanate)	101-68-8	0.1 - 1%
2,4-Toluene diisocyanate	584-84-9	0.1 - 1%
Amorphous silica	7631-86-9	0.1 - 1%
Polymethylene polyphenyl isocyanate	9016-87-9	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:	Rinse mouth thoroughly.			
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:	Destroy or thoroughly clean contaminated shoes. Immediately remove contaminated clothing and shoes and wash skin with soap and plenty o water. If skin irritation or an allergic skin reaction develops, get medical attention.			
Eye contact:	Rinse immediately with plenty of water.	Rinse immediately with plenty of water.		
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) exting	guishing 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.			
		3/18		



Specific hazards arising from the chemical:	During fire, gases hazardous to health may be formed.	
Special protective equipment an	d 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	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:	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
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			Contaminants (29 CFR 1910.1000) (02 2006)
fraction.			
Calcium oxide	TWA	2 mg/m3	US. ACGIH Threshold Limit Values (2011)



	1		
	PEL	5 mg/m3	US. OSHA Table Z-1 Limits for Air
Titerrice discussion	T) A / A	10	Contaminants (29 CFR 1910.1000) (02 2006)
Titanium dioxide	TWA	10 mg/m3	US. ACGIH Threshold Limit Values (2011) US. OSHA Table Z-1 Limits for Air
Titanium dioxide - Total dust.	PEL	15 mg/m3	Contaminants (29 CFR 1910.1000) (02 2006)
Titanium dioxide - Respirable	TWA	15 millions of	US. OSHA Table Z-3 (29 CFR 1910.1000) (03
fraction.		particles per	2016)
		cubic foot of	
		air	
Titanium dioxide - Total dust.	TWA	15 mg/m3	US. OSHA Table Z-3 (29 CFR 1910.1000) (03
			2016)
Titanium dioxide - Respirable	TWA	5 mg/m3	US. OSHA Table Z-3 (29 CFR 1910.1000) (03
fraction.			2016)
Titanium dioxide - Total dust.	TWA	50 millions of	US. OSHA Table Z-3 (29 CFR 1910.1000) (03
		particles per	2016)
		cubic foot of	
		air	
Crystalline Silica (Quartz)/	TWA	0.025 mg/m3	US. ACGIH Threshold Limit Values (2011)
Silica Sand - Respirable			
fraction.			
Crystalline Silica (Quartz)/	TWA	0.05 mg/m3	US. OSHA Specifically Regulated Substances
Silica Sand - Respirable dust.			(29 CFR 1910.1001-1053) (03 2016)
	OSHA_AC	0.025 mg/m3	US. OSHA Specifically Regulated Substances
	Т		(29 CFR 1910.1001-1053) (03 2016)
Crystalline Silica (Quartz)/	PEL	0.05 mg/m3	US. OSHA Table Z-1 Limits for Air
Silica Sand - Respirable dust.			Contaminants (29 CFR 1910.1000) (03 2016)
Crystalline Silica (Quartz)/	TWA	2.4 millions	US. OSHA Table Z-3 (29 CFR 1910.1000)
Silica Sand - Respirable.		of particles	(2000)
		per cubic foot	
		of air	
	TWA	0.1 mg/m3	US. OSHA Table Z-3 (29 CFR 1910.1000) (2000)
Hydrotreated heavy	TWA	5 mg/m3	US. ACGIH Threshold Limit Values (03 2014)
naphthenic distillate -		5	
Inhalable fraction.			
Hydrotreated heavy	PEL	500 ppm 2,000 mg/m3	US. OSHA Table Z-1 Limits for Air
naphthenic distillate			Contaminants (29 CFR 1910.1000) (02 2006)
Hydrotreated heavy	PEL	5 mg/m3	US. OSHA Table Z-1 Limits for Air
naphthenic distillate - Mist.		5	Contaminants (29 CFR 1910.1000) (02 2006)
Dibutyl tin dilaurate - as Sn	STEL	0.2 mg/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
	I CL	0.1 119/113	Contaminants (29 CFR 1910.1000) (02 2006)
4,4'-Methylene	TWA	0.005 ppm	US. ACGIH Threshold Limit Values (2011)
bis(phenylisocyanate)	1117	0.000 ppm	
	Ceiling	0.02 ppm 0.2 mg/m3	US. OSHA Table Z-1 Limits for Air
	Seming	0.02 ppm 0.2 mg/m3	Contaminants (29 CFR 1910.1000) (02 2006)
2,4-Toluene diisocyanate -	STEL	0.005 ppm	US. ACGIH Threshold Limit Values (03 2016)
Inhalable fraction and vapor.	JILL	0.000 ppm	
	TWA	0.001 ppm	US. ACGIH Threshold Limit Values (03 2016)
2,4-Toluene diisocyanate	Ceiling	0.02 ppm 0.14 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
Amorphous silica	TWA	20 millions of	US. OSHA Table Z-3 (29 CFR 1910.1000)
		particles per	(2000)
		cubic foot of	
		air	
	TWA	0.8 mg/m3	US. OSHA Table Z-3 (29 CFR 1910.1000)
		gg	(2000)
	1		1 1/

Chemical name	Туре	Exposure Limit Values	Source
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) (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)
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)
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 fraction.	TWA	0.10 mg/m3	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (06 2015)
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) (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)
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)
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)	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)
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) (09 2017)
2,4-Toluene diisocyanate	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)
2,4-Toluene 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)
2,4-Toluene diisocyanate	TWA	0.005 ppm 0.036 mg/	M3 Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017)
	STEL	0.02 ppm 0.14 mg/	M3 Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017)
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)

Biological Limit Values

Chemical Identity	Exposure Limit Values	Source
2,4-Toluene diisocyanate (Toluene diamine (sum of 2,4- and 2,6-isomers), with hydrolysis: Sampling time: End of shift.)	5 μg/g (Creatinine in urine)	ACGIH BEI (03 2018)

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:	liquid
Form:	liquid
Color:	Green
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 explosi	ve 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:	1.015
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 e Inhalation:	xposure In high concentrations, vapors, fumes or mists may irritate nose, throat and mucus membranes.	
Skin Contact:	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.	
Ingestion:	No data available.	

Information on toxicological effects

Acute toxicity (list all possible routes of exposure)

Oral Product:	ATEmix: 64,966.26 mg/kg
Dermal Product:	ATEmix: 61,654.52 mg/kg
Inhalation Product:	Not classified for acute toxicity based on available data.



Specified substance(s): Calcium oxide	LC 50 (Rat): 40 mg/m3
Titanium dioxide	LC 50 (Rat): 3.43 mg/l
Hydrotreated heavy naphthenic distillate	LC 50 (Rat): 9.6 mg/l
2,4-Toluene diisocyanate	LC 50 (Rat): 14 mg/l
Amorphous silica	LC 50 (Rat): > 2.08 mg/l
Repeated dose toxicity Product:	No data available.
Skin Corrosion/Irritation Product:	No data available.
Specified substance(s): Calcium oxide	in vivo (Rabbit): Irritating Read-across from supporting substance (structural analogue or surrogate), Key study
Titanium dioxide	in vivo (Rabbit): Not irritant Experimental result, Supporting study
Hydrotreated heavy naphthenic distillate	in vivo (Rabbit): Not irritant Experimental result, Key study
Dibutyl tin dilaurate	In vitro (Human, in vitro reconstituted epidermis model): Not irritant Experimental result, Supporting study
4,4'-Methylene bis(phenylisocyanate)	in vivo (Rabbit): Irritating Read-across based on grouping of substances (category approach), Key study
2,4-Toluene diisocyanate	in vivo (Rabbit): Moderately irritating Experimental result, Supporting study
Amorphous silica	in vivo (Rabbit): Not irritant Experimental result, Key study

Serious Eye Damage/Eye Irritation		
Product: Specified substance(s):	No data available.	
Titanium dioxide	Rabbit, 24 hrs: Not irritating	



	Hydrotreated heavy naphthenic distillate	Rabbit, 24 hrs: Not irritating
	Dibutyl tin dilaurate	Rabbit, 24 hrs: Highly irritating
	2,4-Toluene diisocyanate	Rabbit, 24 - 72 hrs: Category 2
	Amorphous silica	Rabbit, 24 hrs: Not irritating
Respira	tory or Skin Sensitizatio	n
Pro	oduct:	May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause sensitization by inhalation.
Carcino	ogenicity	
Pro	duct:	No data available.
IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:		
	Titanium dioxide	Overall evaluation: Possibly carcinogenic to humans.

Overall evaluation: Carcinogenic to humans.

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

Overall evaluation: Possibly carcinogenic to humans.

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

naphthenic distillate evaluation: Carcinogenic to humans.

Crystalline (Quartz)/	Silica Silica	Known To Be Human Carcinogen.
Sand		
Hydrotreated heavy naphthenic distillate		Known To Be Human Carcinogen.
2,4-Toluene diisocyanate		Reasonably Anticipated to be a Human Carcinogen.

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

Crystalline Silica

(Quartz)/ Silica

2.4-Toluene

diisocyanate

Sand

Germ Cell Mutagenicity

In vitro No data available. Product:

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): Dibutyl tin dilaurate	LC 50 (Ide, silver or golden orfe (Leuciscus idus), 48 h): 2 mg/l Mortality	
2,4-Toluene diisocyanate	LC 50 (Fathead minnow (Pimephales promelas), 96 h): 108.8 - 240.4 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:		
Fish Product:	No data available.	
Specified substance(s): Hydrotreated heavy naphthenic distillate	NOAEL (Oncorhynchus mykiss, 14 d): >= 1,000 mg/l QSAR QSAR, 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 (B Product:	CF) No data available.
Partition Coefficient n-octanol / Product:	water (log Kow) No data available.
Specified substance(s): Dibutyl tin dilaurate	Log Kow: 3.12
Mobility in soil:	No data available.
Other adverse effects:	Harmful 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	
2,4-Toluene diisocyanate	De minimis concentration:	TSCA 5(a)(2)% 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)	
2,4-Toluene diisocyanate	100 lbs.
Toluene-2,6-Diisocyanate	100 lbs.
Methanol	5000 lbs.
Chlorobenzene	100 lbs.
Ethylbenzene	1000 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 quan
4,4'-Methylene	5000 lbs.
bis(phenylisocyanate	e)
2,4-Toluene diisocya	nate 100 lbs.
Diisodecyl phthalate	
Polymethylene	
polyphenyl isocyana	e
Toluene-2,6-Diisocy	anate 100 lbs.
Methanol	5000 lbs.
Diisodecyl pht	alate
(mixed Is)	
Chlorobenzene	100 lbs.
Ethylbenzene	1000 lbs.



SARA 311/312 Hazardous Chemical

Chemical Identity	Threshold Planning Quantity
2,4-Toluene diisocyanate	500lbs
Toluene-2,6-Diisocyanate	100lbs
Calcium Carbonate	10000 lbs
(Limestone)	
Calcium oxide	10000 lbs
Titanium dioxide	10000 lbs
Crystalline Silica (Quartz)/	10000 lbs
Silica Sand	
Hydrotreated heavy	10000 lbs
naphthenic distillate	
Dibutyl tin dilaurate	10000 lbs
Tosyl isocyanate	10000 lbs
4,4'-Methylene	10000 lbs
bis(phenylisocyanate)	
Amorphous silica	10000 lbs
Polymethylene polyphenyl	10000 lbs
isocyanate	

SARA 313 (TRI Reporting) Chemical Identity

2,4-Toluene diisocyanate

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

Reportable quantity

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

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

Chemical Identity

Calcium Carbonate (Limestone) Calcium oxide Titanium dioxide Crystalline Silica (Quartz)/ Silica Sand Hydrotreated heavy naphthenic distillate 2,4-Toluene diisocyanate



US. Massachusetts RTK - Substance List

Chemical Identity

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

US. Pennsylvania RTK - Hazardous Substances

<u>Chemical Identity</u> Calcium Carbonate (Limestone) Calcium oxide Titanium dioxide 2,4-Toluene diisocyanate

US. Rhode Island RTK

<u>Chemical Identity</u> Calcium Carbonate (Limestone) Calcium oxide Titanium dioxide

International regulations

Montreal protocol

Not applicable

Stockholm convention

Not applicable

Rotterdam convention

Not applicable

Kyoto protocol

Not applicable

VOC:

Regulatory VOC (less water and exempt solvent)		11 g/l
VOC Method 310	:	0.71 %



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.

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

Revision Date:	10/12/2018
Version #:	1.2
Further Information:	No data available.



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