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SAFETY DATA SHEET

1. Identification

Material name: GEOGARD LO BASE COAT 2 GL

Material: 491L002C

Recommended use and restriction on use

Recommended use: Coatings Restrictions on use: Not known.

Manufacturer/Importer/Supplier/Distributor Information

Tremco U.S. Roofing 3735 Green Road Beachwood OH 44122

US

Contact person:EH&S DepartmentTelephone:216-292-5000

Emergency telephone number: 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 99.62 %

or mist

Environmental Hazards

Acute hazards to the aquatic Category 3 environment

100 %

Unknown toxicity - Environment

Acute hazards to the aquatic 97.65 % environment

Chronic hazards to the aquatic

environment

Label Elements



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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 (%)*	
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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 of water. If skin irritation or an allergic skin reaction develops, get medical

attention.

Eye contact: 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) 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.



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Specific hazards arising from

the chemical:

During fire, gases hazardous to health may be formed.

Special protective equipment and precautions for firefighters

Special fire fighting

procedures:

No data available.

Special protective equipment

for fire-fighters:

Self-contained breathing apparatus and full protective clothing must be

worn in case of fire.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures: Ventilate closed spaces before entering them. Evacuate area. See Section 8 of the SDS for Personal Protective Equipment. Keep upwind. Keep unauthorized personnel away. Do not touch damaged containers or spilled

material unless wearing appropriate protective clothing.

Methods and material for containment and cleaning

up:

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

disposal according to local regulations.

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

accordance with all applicable regulations.

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

to do so.

7. Handling and storage

Precautions for safe handling:

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

Conditions for safe storage, including any incompatibilities:

Store locked up.

8. Exposure controls/personal protection

Control Parameters

Occupational Exposure Limits

Chemical Identity	Туре	Exposure Limit Values	Source
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)



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	PEL		5 mg/m3	US. OSHA Table Z-1 Limits for Air
T' 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	T14/4		10 / 0	Contaminants (29 CFR 1910.1000) (02 2006)
Titanium dioxide	TWA		10 mg/m3	US. ACGIH Threshold Limit Values (2011)
Titanium dioxide - Total dust.	PEL		15 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
Titanium dioxide - Respirable	TWA		15 millions of	US. OSHA Table Z-3 (29 CFR 1910.1000) (03
fraction.			particles per	2016)
			cubic foot of	
T' ' ' T	TIA		air	LUG - 00114 T - 11 - 7 0 (00 05D 4040 4000) (00
Titanium dioxide - Total dust.	TWA		15 mg/m3	US. OSHA Table Z-3 (29 CFR 1910.1000) (03 2016)
Titanium dioxide - Respirable fraction.	TWA		5 mg/m3	US. OSHA Table Z-3 (29 CFR 1910.1000) (03 2016)
Titanium dioxide - Total dust.	TWA		50 millions of	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.				GO. AGGITT THIOGRAD LITTLE VALUE (2011)
Crystalline Silica (Quartz)/ Silica Sand - Respirable dust.	TWA		0.05 mg/m3	US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053) (03 2016)
Silica Sariu - Respirable dust.	OSHA_AC		0.025 mg/m3	US. OSHA Specifically Regulated Substances
	T			(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 -			og	
Inhalable fraction.				
Hydrotreated heavy	PEL	500 nnm	2,000 mg/m3	US. OSHA Table Z-1 Limits for Air
naphthenic distillate	I LL	эоо ррпп	2,000 mg/m3	Contaminants (29 CFR 1910.1000) (02 2006)
Hydrotreated heavy	PEL		E ma/m2	US. OSHA Table Z-1 Limits for Air
	PEL		5 mg/m3	
naphthenic distillate - Mist.	OTEL		0.0/0	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
				Contaminants (29 CFR 1910.1000) (02 2006)
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)
2,4-Toluene diisocyanate -	STEL	0.005 ppm		US. ACGIH Threshold Limit Values (03 2016)
Inhalable fraction and vapor.				
	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	(=555)
			air	
	TWA		0.8 mg/m3	US. OSHA Table Z-3 (29 CFR 1910.1000)
	1 7 7 7		0.6 (119/1113	·
				(2000)

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



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	I		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



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				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 0.05	51 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 0.03	36 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017)
	STEL	0.02 ppm 0.1	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:	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.



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

recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. Air-purifying respirator with an

appropriate, government approved (where applicable), air-purifying filter, cartridge or canister. Contact health and safety professional or

manufacturer for specific information.

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

immediately after handling the product. Contaminated work clothing should

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

9. Physical and chemical properties

Appearance

Physical state:liquidForm:liquidColor: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 explosive limits

Flammability limit - upper (%):

Flammability limit - lower (%):

Explosive limit - upper (%):

No data available.

No data available.

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.



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Chemical Stability: Material is stable under normal conditions.

Possibility of hazardous

reactions:

Products:

No data available.

Conditions to avoid: Avoid heat or contamination.

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

Hazardous Decomposition

Thermal decomposition or combustion may liberate carbon oxides and

other toxic gases or vapors.

11. Toxicological information

Information on likely routes of exposure

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

mucus membranes.

Skin Contact: 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.



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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: No data available.

Specified substance(s):

Titanium dioxide Rabbit, 24 hrs: Not irritating



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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

Respiratory or Skin Sensitization

Product:

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

May cause sensitization by inhalation.

Carcinogenicity

Product: No data available.

IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:

Titanium dioxide Overall evaluation: Possibly carcinogenic to humans.

Crystalline Silica (Quartz)/ Silica

Sand

Overall evaluation: Carcinogenic to humans.

Hydrotreated heavy naphthenic distillate

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

evaluation: Carcinogenic to humans.

2,4-Toluene diisocyanate Overall evaluation: Possibly carcinogenic to humans.

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

Silica Known To Be Human Carcinogen. Crystalline

(Quartz)/ Silica

Sand

Hydrotreated heavy Known To Be Human Carcinogen.

naphthenic distillate

2.4-Toluene Reasonably Anticipated to be a Human Carcinogen.

diisocyanate

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



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Product: No data available.

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

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

Aspiration Hazard

Product: No data available.

Other effects: No data available.

12. Ecological information

Ecotoxicity:

Acute hazards to the aquatic environment:

Fish

Product: No data available.

Specified substance(s):

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

naphthenic distillate Supporting study

Aquatic Invertebrates

Product: No data available.



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Toxicity to Aquatic Plants

Product: No data available.

Persistence and Degradability

Biodegradation

Product: No data available.

BOD/COD Ratio

Product: No data available.

Bioaccumulative potential

Bioconcentration Factor (BCF)

Product: No data available.

Partition Coefficient n-octanol / water (log Kow)

Product: No data available.

Specified substance(s):

Dibutyl tin dilaurate Log Kow: 3.12

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



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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

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. 1000 lbs. Ethylbenzene

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories

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

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

4,4'-Methylene 5000 lbs.

bis(phenylisocyanate)

2,4-Toluene diisocyanate 100 lbs.

Diisodecyl phthalate

Polymethylene

polyphenyl isocyanate

Toluene-2,6-Diisocyanate 100 lbs. Methanol 5000 lbs.

Diisodecyl phthalate

(mixed Is)

100 lbs. Chlorobenzene Ethylbenzene 1000 lbs.



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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

SARA 313 (TRI Reporting)

Polymethylene polyphenyl

Chemical Identity

isocyanate

2,4-Toluene diisocyanate

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

<u>Chemical Identity</u> <u>Reportable quantity</u>

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

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

10000 lbs

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



Revision Date: 10/12/2018

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

Chemical Identity

Calcium Carbonate (Limestone)
Calcium oxide
Titanium dioxide
2,4-Toluene diisocyanate

US. Rhode Island RTK

Chemical Identity

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 : 11 g/l

exempt solvent)

VOC Method 310 : 0.71 %



Revision Date: 10/12/2018

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.



Revision Date: 10/12/2018

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.