

Revision Date: 12/28/2018

SAFETY DATA SHEET

1. Identification

Material name: ELS 5 GL Material: 360620 805

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:

Telephone:

EH&S Department 216-292-5000

Emergency telephone number:

1-800-424-9300 (US); 1-613-996-6666 (Canada)

2. Hazard(s) identification

Hazard Classification

Health Hazards

Serious Eye Damage/Eye Irritation

Germ Cell Mutagenicity

Category 2A Category 1B

Carcinogenicity

Category 1A

Unknown toxicity - Health

Acute toxicity, oral

45.4 %

Acute toxicity, dermal

47.79 %

Acute toxicity, inhalation, vapor

100 %

Acute toxicity, inhalation, dust

100 %

or mist

Environmental Hazards

Acute hazards to the aquatic

Category 2

environment

Unknown toxicity - Environment

Acute hazards to the aquatic

97.89 %

environment

Chronic hazards to the aquatic

100 %

environment

Label Elements

TREMICO

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Hazard Symbol:



Signal Word:

Danger

Hazard Statement:

Causes serious eye irritation. May cause genetic defects.

May cause cancer. Toxic to aquatic life.

Precautionary Statements

Prevention:

Wash thoroughly after handling. 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 IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. IF exposed or concerned: Get

medical advice/attention.

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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Asphalt	8052-42-4	20 - <50%
Calcium Carbonate (Limestone)	1317-65-3	10 - <20%
Stoddard solvent (Mineral Spirits)	8052-41-3	10 - <20%
Cellulose	9004-34-6	1 - <5%
Magnesite	546-93-0	1 - <5%
Quaternary ammonium salt	8030-78-2	0.01 - <1%
Crystalline Silica (Quartz)/ Silica Sand	14808-60-7	0.1 - <1%
1,2,4-Trimethylbenzene	95-63-6	0.1 - <1%
Nonane	111-84-2	0.1 - <1%
Hydrogen sulfide	7783-06-4	0.01 - <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:

Move to fresh air.

Skin Contact:

Wash skin thoroughly with soap and water. Get medical attention if

symptoms occur.

Eye contact:

Immediately flush with plenty of water for at least 15 minutes. If easy to do,

remove contact lenses. Get medical attention.

Most important symptoms/effects, acute and delayed

Symptoms:

May cause skin and eye irritation.

Indication of immediate medical attention and special treatment needed

Treatment:

Symptoms may be delayed.

5. Fire-fighting measures

General Fire Hazards:

No unusual fire or explosion hazards noted.

Suitable (and unsuitable) extinguishing media

Suitable extinguishing media:

Use fire-extinguishing media appropriate for surrounding materials.

Unsuitable extinguishing

ing

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

media:

Specific hazards arising from

the chemical:

During fire, gases hazardous to health may be formed.

Special protective equipment and precautions for firefighters



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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: No data available.

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:

Do not contaminate water sources or sewer. Prevent further leakage or

spillage if safe to do so. Avoid release to the environment.

7. Handling and storage

Precautions for safe handling:

Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices. Do not handle until all safety precautions have been read and understood. Obtain special instructions before use. Use personal protective equipment as required. Avoid contact with eyes. Wash hands thoroughly after handling.

Conditions for safe storage, including any incompatibilities:

Store locked up.

8. Exposure controls/personal protection

Control Parameters

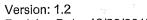
Occupational Exposure Limits

Chemical Identity	Туре	Exposure Limit Values	Source
Asphalt - Inhalable fume as benzene solubles	TWA	0.5 mg/m3	US. ACGIH Threshold Limit Values (03 2018)
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)
Stoddard solvent (Mineral Spirits)	TWA	100 ppm	US. ACGIH Threshold Limit Values (2011)
Орино	PEL	500 ppm 2,900 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
Cellulose	TWA	10 mg/m3	US. ACGIH Threshold Limit Values (2011)
Cellulose - Total dust.	PEL	15 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
Cellulose - Respirable fraction.	PEL	5 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
Magnesite - Total dust.	PEL	15 mg/m3	US. OSHA Table Z-1 Limits for Air



				Contaminants (29 CFR 1910.1000) (02 2006)
Magnesite - Respirable	PEL.		5 mg/m3	US. OSHA Table Z-1 Limits for Air
fraction.				Contaminants (29 CFR 1910.1000) (02 2006)
Crystalline Silica (Quartz)/ Silica Sand - Respirable fraction.	TWA		0.025 mg/m3	US. ACGIH Threshold Limit Values (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)
	OSHA_AC T		0.025 mg/m3	US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053) (03 2016)
Crystalline Silica (Quartz)/ Silica Sand - Respirable dust.	PEL		0.05 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (03 2016)
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)
1,2,4-Trimethylbenzene	REL	25 ppm	125 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards (2010)
	TWA	25 ppm	125 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)
	TWA	25 ppm	125 mg/m3	US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A (06 2008)
	AN ESL		25 ppb	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (07 2011)
	STESL		140 ppb	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (02 2013)
	ST ESL		700 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (02 2013)
	AN ESL		125 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (07 2011)
	TWA PEL	25 ppm	125 mg/m3	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants (08 2010)
	TWA	25 ppm		US. ACGIH Threshold Limit Values (2011)
Nonane	TWA	200 ppm		US. ACGIH Threshold Limit Values (02 2012)
Hydrogen sulfide	TWA	1 ppm		US. ACGIH Threshold Limit Values (2011)
	STEL	5 ppm		US. ACGIH Threshold Limit Values (2011)
	Ceiling	20 ppm		US. OSHA Table Z-2 (29 CFR 1910.1000) (02 2006)
	MAX. CONC	50 ppm		US. OSHA Table Z-2 (29 CFR 1910.1000) (02 2006)

Chemical name	Chemical name Type Exposure Limit Values		Source	
Asphalt - Aerosol, inhalable as benzene solubles	TWA	0.5 mg/m3	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)	
Asphalt - Inhalable fraction as benzene solubles	TWA	0.5 mg/m3	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)	
Asphalt - Fume.	TWA	5 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017)	
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	

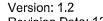




	1			296/97, as amended) (07 2007)
Calcium Carbonate (Limestone) - Respirable fraction.	TWA		3 mg/m3	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
Calcium Carbonate (Limestone) - Total dust.	TWA		10 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017)
Stoddard solvent (Mineral Spirits)	STEL		580 mg/m3	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
	TWA		290 mg/m3	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
Stoddard solvent (Mineral Spirits)	TWA	100 ppm		Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)
Stoddard solvent (Mineral Spirits)	TWA	100 ppm	525 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017)
Cellulose - 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)
Cellulose - 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)
Cellulose	TWA	- 14	10 mg/m3	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)
Cellulose - 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)
1,2,4-Trimethylbenzene	TWA	25 ppm	123 mg/m3	Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2) (07 2009)
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	TWA	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) (09 2017)



Chemical name	Chemical name Type Exposure Limit Values		Source
Asphalt - Aerosol, inhalable as benzene solubles	TWA	0.5 mg/m3	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
Asphalt - Inhalable fraction as benzene solubles	TWA	0.5 mg/m3	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)
Asphalt - Fume.	TWA	5 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017)
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)
Stoddard solvent (Mineral Spirits)	STEL	580 mg/m3	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
	TWA	290 mg/m3	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)





Stoddard solvent (Mineral Spirits)	TWA	100 ppm		Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)
Stoddard solvent (Mineral Spirits)	TWA	100 ppm	525 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017)
Cellulose - 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)
Cellulose - 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)
Cellulose	TWA		10 mg/m3	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)
Cellulose - Total dust.	TWA		10 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017)
Magnesite - Total dust.	TWA		10 mg/m3	Canada, Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017)
Propylene glycol - Aerosol.	TWA		10 mg/m3	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)
Propylene glycol - Vapor and aerosol.	TWA	50 ppm	155 mg/m3	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (06 2015)
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)
1,2,4-Trimethylbenzene	TWA	25 ppm	123 mg/m3	Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2) (07 2009)
1,2,4-Trimethylbenzene	TWA	25 ppm		Canada. British Columbia OELs. (Occupationa Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
1,2,4-Trimethylbenzene	TWA	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) (09 2017)
Nonane	TWA	200 ppm		Canada. British Columbia OELs. (Occupationa Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (05 2013)
Nonane	TWA	200 ppm		Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (06 2015)
Nonane	TWA	200 ppm	1,050 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (12 2008)
Xylene	TWA	100 ppm	434 mg/m3	Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2) (07 2009)
	STEL	150 ppm	651 mg/m3	Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2) (07 2009)
Xylene	TWA	100 ppm		Canada. British Columbia OELs. (Occupationa Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
	STEL	150 ppm		Canada. British Columbia OELs. (Occupationa Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation



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				296/97, as amended) (07 2007)
Xylene	TWA	100 ppm		Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)
11.00	STEL	150 ppm		Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)
Xylene	STEL	150 ppm	651 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017)
	TWA	100 ppm	434 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017)
Hydrogen sulfide	CEILING	10 ppm		Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
Hydrogen sulfide	STEL	15 ppm		Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)
	TWA	10 ppm		Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)
Hydrogen sulfide	TWA	10 ppm	14 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017)
	STEL	15 ppm	21 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017)
Naphthalene	STEL	15 ppm		Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
	TWA	10 ppm		Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
Naphthalene	TWA	10 ppm		Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)
Naphthalene	TWA	10 ppm	52 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017)
	STEL	15 ppm	79 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017)
Ethylbenzene	TWA	20 ppm		Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (09 2011)
Ethylbenzene	TWA	20 ppm		Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (06 2015)
Ethylbenzene	STEL	125 ppm	543 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017)
	TWA	100 ppm	434 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017)

Appropriate Engineering Controls

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



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Individual protection measures, such as personal protective equipment

General information:

Provide easy access to water supply and eye wash facilities. Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process

rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable

level.

Eye/face protection:

Wear safety glasses with side shields (or goggles).

Skin Protection

Hand Protection:

Use suitable protective gloves if risk of skin contact.

Other:

Wear suitable protective clothing.

Respiratory Protection:

In case of inadequate ventilation use suitable respirator. Seek advice from

local supervisor.

Hygiene measures:

Observe good industrial hygiene practices. Wash hands before breaks and

immediately after handling the product. Avoid contact with eyes.

9. Physical and chemical properties

Appearance

Physical state:

liquid

Form:

Viscous Liquid

Color:

Black

Odor:

Mild petroleum/solvent No data available.

Odor threshold:

No data avallable.

pH:

No data available.

Melting point/freezing point:

No data available.

Initial boiling point and boiling range:

No data available.

Evaporation rate:

Flash Point:

Slower than Ether

Flammability (solid, gas):

No

Upper/lower limit on flammability or explosive 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:

1.18

Solubility(ies)

Solubility in water:

Practically Insoluble

Solubility (other):

No data available.



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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:

Avoid contact with oxidizing agents (e.g. nitric acid, peroxides and

chromates).

Hazardous Decomposition

Products:

Thermal decomposition or combustion may liberate carbon oxides and

other toxic gases or vapors.

11. Toxicological information

Information on likely routes of exposure

Inhalation:

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

mucus membranes.

Skin Contact:

May be harmful in contact with skin.

Eye contact:

Causes serious eye irritation.

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:

Not classified for acute toxicity based on available data.



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Specified substance(s):

Asphalt

LD 50 (Rat): > 5,000 mg/kg

Cellulose

LD 50 (Rat): 5,001 mg/kg

Magnesite

LD 50 (Rat): > 2,000 mg/kg

1,2,4-Trimethylbenzene

LD 50 (Rat): 3,280 mg/kg

Nonane

LD 50 (Rat): > 5,000 mg/kg

Dermal

Product:

Not classified for acute toxicity based on available data.

Specified substance(s):

. Asphalt LD 50 (Rabbit): > 2,000 mg/kg

Cellulose

LD 50 (Rabbit): 5,001 mg/kg

1,2,4-Trimethylbenzene

LD 50 (Rat): 3,440 mg/kg

Nonane

LD 50 (Rabbit): > 2,000 mg/kg

Inhalation Product:

Specified substance(s):

Asphalt

LC 50 (Rat): > 94.4 mg/m3

Cellulose

LC 50 (Rabbit): 20.1 mg/l

1,2,4-Trimethylbenzene

LC 50 (Rat): 10,200 mg/m3

Nonane

LC 50 (Rat): 23.76 mg/l

Repeated dose toxicity

Product:

No data available.

Skin Corrosion/Irritation

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Product:

No data available.

Specified substance(s):

Asphalt

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

Magnesite

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

Experimental result, Key study

1,2,4-Trimethylbenzene

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

analogue or surrogate), Key study

Nonane

in vivo (Rabbit): Irritating Read-across based on grouping of substances

(category approach), Key study

Serious Eye Damage/Eye Irritation

Product:

No data available.

Specified substance(s):

Asphalt

Rabbit, 24 hrs: Not irritating

Magnesite

Reconstituted Corneal Epithelium model, 10 min: Not irritating

1,2,4-Trimethylbenzene

Rabbit, 30 min: Not irritating

Nonane

Rabbit, 24 - 72 hrs: Not irritating

Respiratory or Skin Sensitization

Product:

No data available.

Carcinogenicity

Product:

No data available.

IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:

Asphalt

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):

Crystalline Silica

(Quartz)/ Silica

Cancer

Sand



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Germ Cell Mutagenicity

In vitro

Product:

No data available.

In vivo

Product:

No data available.

Reproductive toxicity

Product:

No data available.

Specific Target Organ Toxicity - Single Exposure

Product:

No data available.

Specific Target Organ Toxicity - Repeated Exposure

Product:

No data available.

Aspiration Hazard

Product:

No data available.

Other effects:

No data available.

12. Ecological information

Ecotoxicity:

Acute hazards to the aquatic environment:

Fish

Product:

No data available.

Specified substance(s):

Quaternary ammonium

salt

LC 50 (Fathead minnow (Pimephales promelas), 96 h): 0.093 - 0.143 mg/l

Mortality

1,2,4-Trimethylbenzene

LC 50 (Fathead minnow (Pimephales promelas), 96 h): 7.19 - 8.28 mg/l

Mortality

Hydrogen sulfide

LC 50 (Fathead minnow (Pimephales promelas), 96 h): 0.013 - 0.0172 mg/l

Mortality

Aquatic Invertebrates

Product:

No data available.

Specified substance(s):



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Hydrogen sulfide

LC 50 (Sand shrimp (Metapenaeus monoceros), 96 h): 0.0352 mg/l Mortality

EC 50 (Oligochaete (Stylaria lacustris)): +/- +/- 50 mg/l Intoxication EC 50 (Leech (Herpobdella octoculata)): +/- +/- 10 mg/l Intoxication EC 50 (Oligochaete (Stylaria lacustris)): +/- +/- 10 mg/l Intoxication EC 50 (Tubificid worm (Tubifex tubifex)): +/- +/- 50 mg/l Intoxication

Chronic hazards to the aquatic environment:

Fish

Product:

No data available.

Specified substance(s):

Asphalt

NOAEL (Oncorhynchus mykiss, 28 d): >= 1,000 mg/l Read-across from supporting substance (structural analogue or surrogate), Key study LL 50 (Oncorhynchus mykiss, 28 d): > 1,000 mg/l Read-across from supporting substance (structural analogue or surrogate), Key study

Aquatic Invertebrates

Product:

No data available.

Toxicity to Aquatic Plants

Product:

No data available.

Persistence and Degradability

Biodegradation

Product:

No data available.

BOD/COD Ratio

Product:

No data available.

Bioaccumulative potential

Bioconcentration Factor (BCF)

Product:

No data available.

Partition Coefficient n-octanol / water (log Kow)

Product:

No data available.

Specified substance(s):

Stoddard solvent (Mineral

Log Kow: 3.16 - 7.15

Spirits)

Nonane

Log Kow: 5.46

Mobility in soil:

No data available.

Other adverse effects:

Toxic to aquatic organisms.



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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)

None present or none present in regulated quantities.

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

Chemical Identity

Crystalline Silica

(Quartz)/ Silica Sand

OSHA hazard(s)

kidney effects lung effects

immune system effects

Cancer

CERCLA Hazardous Substance List (40 CFR 302.4):

Chemical Identity

Reportable quantity

Asphalt

100 lbs.

Nonane

100 lbs.

Xylene

100 lbs.

Hydrogen sulfide Naphthalene

100 lbs.

100 lbs.

Ethylbenzene

1000 lbs.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories

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



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Serious eye damage or eye irritation Germ Cell Mutagenicity Carcinogenicity

SARA 302 Extremely Hazardous Substance

Reportable

Chemical Identity
Hydrogen sulfide

guantity 100 lbs. **Threshold Planning Quantity**

500 lbs.

SARA 304 Emergency Release Notification

Chemical Identity	Reportable quantity
Asphalt	100 lbs.
Nonane	100 lbs.
Xylene	100 lbs.
Hydrogen sulfide	100 lbs.
Naphthalene	100 lbs.
Ethylbenzene	1000 lbs.

SARA 311/312 Hazardous Chemical

Chemical Identity	Threshold Planning Quantity
Hydrogen sulfide	500lbs
Asphalt	10000 lbs
Calcium Carbonate	10000 lbs
(Limestone)	
Stoddard solvent (Mineral	10000 lbs
Spirits)	
Cellulose	10000 lbs
Magnesite	10000 lbs
Quaternary ammonium	10000 lbs
salt	
Crystalline Silica (Quartz)/	10000 lbs
Silica Sand	
1,2,4-Trimethylbenzene	10000 lbs
Nonane	10000 lbs
· · · ·	

SARA 313 (TRI Reporting)

None present or none present in regulated quantities.

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

Chemical Identity

Reportable quantity

Hydrogen sulfide

lbs

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

Chemical Identity

Reportable quantity

Xylene

Reportable quantity: lbs.

US State Regulations

US. California Proposition 65



WARNING

Cancer - www.P65Warnings.ca.gov



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

Chemical Identity

Asphalt

Calcium Carbonate (Limestone)

Stoddard solvent (Mineral Spirits)

Cellulose

Magnesite

Crystalline Silica (Quartz)/ Silica Sand

US. Massachusetts RTK - Substance List

Chemical Identity

Asphalt

Calcium Carbonate (Limestone)

Stoddard solvent (Mineral Spirits)

Cellulose

Magnesite

Crystalline Silica (Quartz)/ Silica Sand

Hydrogen sulfide

US. Pennsylvania RTK - Hazardous Substances

Chemical Identity

Asphalt

Calcium Carbonate (Limestone)

Stoddard solvent (Mineral Spirits)

Cellulose

US. Rhode Island RTK

Chemical Identity

Asphalt

Calcium Carbonate (Limestone)

Stoddard solvent (Mineral Spirits)

Cellulose

Magnesite

International regulations

Montreal protocol

Not applicable

Stockholm convention

Not applicable

Rotterdam convention

Not applicable

Kyoto protocol

Not applicable

VOC:

Regulatory VOC (less water and

: 192 g/l

exempt solvent)

VOC Method 310

: 16.31 %



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Inventory Status:

Australia AICS:

All components in this product are 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:

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

Korea Existing Chemicals Inv. (KECI):

All components in this product are 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:

All components in this product are 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:

All components in this product are 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.

Mexico INSQ:

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

Ontario Inventory:

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

Taiwan Chemical Substance Inventory:

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



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

Revision Date:

12/28/2018

Version #:

1.2

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.