



SAFETY DATA SHEET

1. Identification

Material name: CONCRETE SURFACE RETARDER F
Material: 080A 55

Recommended use and restriction on use

Recommended use: Coatings
Restrictions on use: Not known.

Manufacturer/Importer/Supplier/Distributor Information

EUCLID CHEMICAL COMPANY
19218 REDWOOD ROAD
CLEVELAND OH 44110
US

Contact person: EH&S Department
Telephone: 216-531-9222
Emergency telephone number: 1-800-424-9300 (US); 1-613-996-6666 (Canada)

2. Hazard(s) identification

Hazard Classification

Physical Hazards

Flammable liquids Category 3

Health Hazards

Skin Corrosion/Irritation Category 2
Serious Eye Damage/Eye Irritation Category 2B
Germ Cell Mutagenicity Category 1B
Carcinogenicity Category 1B
Aspiration Hazard Category 1

Unknown toxicity - Health

Acute toxicity, oral 30.97 %
Acute toxicity, dermal 37.66 %
Acute toxicity, inhalation, vapor 100 %
Acute toxicity, inhalation, dust or mist 100 %

Environmental Hazards

Acute hazards to the aquatic environment Category 2

Unknown toxicity - Environment

Acute hazards to the aquatic environment 72.45 %
Chronic hazards to the aquatic environment 100 %

Label Elements

**Hazard Symbol:****Signal Word:**

Danger

Hazard Statement:

Flammable liquid and vapor.
May cause genetic defects.
May cause cancer.
May be fatal if swallowed and enters airways.
Toxic to aquatic life.
Causes skin and eye irritation.

Precautionary Statement:**Prevention:**

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep container tightly closed. Ground and bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting/equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Wear protective gloves/protective clothing/eye protection/face protection. Wash thoroughly after handling. 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 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 ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation occurs: Get medical advice/attention. IF SWALLOWED: Immediately call a POISON CENTER/doctor. Do NOT induce vomiting. If exposed or concerned: Get medical advice/attention. Specific treatment (see this label). Take off contaminated clothing. In case of fire: Use ... to extinguish.

Storage:

Store in well-ventilated place. Keep cool. Store locked up.

Disposal:

Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

Other hazards which do not result in GHS classification:

Static accumulating flammable liquid can become electrostatically charged even in bonded and grounded equipment. Sparks may ignite liquid and vapor. May cause flash fire or explosion.

3. Composition/information on ingredients**Mixtures**



Chemical Identity	CAS number	Content in percent (%)*
Aromatic petroleum distillates	64742-95-6	15 - 40%
1,2,4-Trimethylbenzene	95-63-6	10 - 30%
Benzene, dimethyl-	1330-20-7	7 - 13%
1,3,5-Trimethylbenzene	108-67-8	3 - 7%
Ethylbenzene	100-41-4	1 - 5%
1,2,3-Trimethylbenzene	526-73-8	1 - 5%
Methanol	67-56-1	0.5 - 1.5%
Cumene	98-82-8	0.1 - 1%

* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

4. First-aid measures

- Ingestion:** Call a physician or poison control center immediately. Rinse mouth. Never give liquid to an unconscious person. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.
- Inhalation:** Move to fresh air.
- Skin Contact:** Take off immediately all contaminated clothing. Immediately flush with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash contaminated clothing before reuse. Get medical attention.
- 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:** Respiratory tract irritation. Prolonged or repeated contact with skin may cause redness, itching, irritation and eczema/chapping.

Indication of immediate medical attention and special treatment needed

- Treatment:** Symptoms may be delayed.

5. Fire-fighting measures

- General Fire Hazards:** Use water spray to keep fire-exposed containers cool. Water may be ineffective in fighting the fire. Fight fire from a protected location. Move containers from fire area if you can do so without risk.

Suitable (and unsuitable) extinguishing media

- Suitable extinguishing media:** Use fire-extinguishing media appropriate for surrounding materials.
- Unsuitable extinguishing media:** Avoid water in straight hose stream; will scatter and spread fire.



Specific hazards arising from the chemical: Vapors may travel considerable distance to a source of ignition and flash back. Vapors may cause a flash fire or ignite explosively. Prevent buildup of vapors or gases to explosive concentrations.

Special protective equipment and precautions for firefighters

Special fire fighting procedures: No data available.

Special protective equipment for fire-fighters: Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures: Ventilate closed spaces before entering them. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Keep upwind. See Section 8 of the SDS for Personal Protective Equipment. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep unauthorized personnel away.

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. Do not contaminate water sources or sewer.

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. Avoid contact with eyes. Wash hands thoroughly after handling. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground and bond container and receiving equipment. Take precautionary measures against static discharges. Avoid contact with skin. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities: Store locked up. Store in a well-ventilated place. Store in a cool place.

8. Exposure controls/personal protection

Control Parameters

Occupational Exposure Limits

Chemical Identity	type	Exposure Limit Values	Source
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1,2,4-Trimethylbenzene	TWA	25 ppm		US. ACGIH Threshold Limit Values (2011)
Benzene, dimethyl-	STEL	150 ppm		US. ACGIH Threshold Limit Values (2011)
	TWA	100 ppm		US. ACGIH Threshold Limit Values (2011)
	STEL	150 ppm	655 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards (2010)
	REL	100 ppm	435 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards (2010)
	STEL	150 ppm	655 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards (2010)
	REL	100 ppm	435 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards (2010)
	STEL	150 ppm	655 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards (2010)
	REL	100 ppm	435 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards (2010)
	PEL	100 ppm	435 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
	STEL	150 ppm	655 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)
	TWA	100 ppm	435 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)
	TWA	100 ppm	435 mg/m3	US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A (06 2008)
	STEL	150 ppm	655 mg/m3	US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A (06 2008)
	ST ESL		350 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (07 2011)
	ST ESL		80 ppb	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (07 2011)
	AN ESL		42 ppb	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (07 2011)
	AN ESL		180 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (07 2011)
	STEL	150 ppm	655 mg/m3	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants (08 2010)
	Ceiling	300 ppm		US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants (08 2010)
	TWA PEL	100 ppm	435 mg/m3	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants (08 2010)
1,3,5-Trimethylbenzene	TWA	25 ppm		US. ACGIH Threshold Limit Values (2011)
Ethylbenzene	TWA	20 ppm		US. ACGIH Threshold Limit Values (2011)



	PEL	100 ppm	435 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
1,2,3-Trimethylbenzene	TWA	25 ppm		US. ACGIH Threshold Limit Values (2011)
Methanol	TWA	200 ppm		US. ACGIH Threshold Limit Values (2011)
	STEL	250 ppm		US. ACGIH Threshold Limit Values (2011)
	PEL	200 ppm	260 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
Cumene	TWA	50 ppm		US. ACGIH Threshold Limit Values (2011)
	PEL	50 ppm	245 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)

Chemical name	type	Exposure Limit Values	Source
1,2,4-Trimethylbenzene	TWA	25 ppm	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
1,2,4-Trimethylbenzene	TWAEV	25 ppm	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)
1,2,4-Trimethylbenzene	TWA	25 ppm	123 mg/m3 Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (12 2008)
	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)
	STEL	150 ppm	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
	TWA	100 ppm	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
	TWAEV	100 ppm	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)
	STEL	150 ppm	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical



				Agents) (11 2010)
	TWA	100 ppm	434 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (12 2008)
	STEL	150 ppm	651 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (12 2008)
1,3,5-Trimethylbenzene	TWA	25 ppm		Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
1,3,5-Trimethylbenzene	TWAEV	25 ppm		Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)
1,3,5-Trimethylbenzene	TWA	25 ppm	123 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (12 2008)
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	STEL	125 ppm		Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)
	TWAEV	100 ppm		Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)
Ethylbenzene	TWA	100 ppm	434 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (12 2008)
	STEL	125 ppm	543 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (12 2008)



1,2,3-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)
1,2,3-Trimethylbenzene	TWAEV	25 ppm		Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)
1,2,3-Trimethylbenzene	TWA	25 ppm	123 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (12 2008)
Cumene	STEL	75 ppm		Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
	TWA	25 ppm		Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
Cumene	TWAEV	50 ppm		Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)
Cumene	TWA	50 ppm	246 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (12 2008)

Biological Limit Values

Chemical Identity	Exposure Limit Values	Source
Benzene, dimethyl- (Methylhippuric acids: Sampling time: End of shift.)	1.5 g/g (Creatinine in urine)	ACGIH BEI (03 2013)
Ethylbenzene (Sum of mandelic acid and phenylglyoxylic acid: Sampling time: End of shift.)	0.15 g/g (Creatinine in urine)	ACGIH BEI (02 2014)
Methanol (methanol: Sampling time: End of shift.)	15 mg/l (Urine)	ACGIH BEL (03 2013)

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 explosion-proof ventilation equipment. Good general ventilation (typically 10 air changes per hour) should be used. Ventilation 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. Provide easy access to water supply and eye wash facilities.
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 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:	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. When using do not smoke. Wash contaminated clothing before reuse. Avoid contact with skin.

9. Physical and chemical properties**Appearance**

Physical state:	liquid
Form:	liquid
Color:	Tan
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:	160 °C 320 °F
Flash Point:	43 °C 110 °F (Setaflash Closed Cup)
Evaporation rate:	Slower than Ether
Flammability (solid, gas):	No
Upper/lower limit on flammability or explosive limits	
Flammability limit - upper (%):	7 %(V)
Flammability limit - lower (%):	1 %(V)
Explosive limit - upper (%):	No data available.
Explosive limit - lower (%):	No data available.
Vapor pressure:	4.8 hPa
Vapor density:	Vapors are heavier than air and may travel along the floor and in the bottom of containers.
Relative density:	1.06

**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:	< 20.5 mm ² /s (40 °C 104 °F)

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:	Heat, sparks, flames.
Incompatible Materials:	Strong acids. Avoid contact with oxidizing agents (e.g. nitric acid, peroxides and chromates). Strong bases.
Hazardous Decomposition Products:	Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapors.

11. Toxicological information**Information on likely routes of exposure**

Ingestion:	May be ingested by accident. Ingestion may cause irritation and malaise.
Inhalation:	In high concentrations, vapors, fumes or mists may irritate nose, throat and mucus membranes.
Skin Contact:	Causes skin irritation.
Eye contact:	Causes eye irritation.

Information on toxicological effects**Acute toxicity (list all possible routes of exposure)**

Oral Product:	ATEmix: 7,383.06 mg/kg
Dermal Product:	ATEmix: 9,452.48 mg/kg
Inhalation Product:	No data available.

Specified substance(s):



1,2,4-Trimethylbenzene	LC 50 (Rat, 4 h): 10,200 mg/m ³
Benzene, dimethyl-	LC 50 (Rat, 4 h): 6,350 mg/l
1,3,5-Trimethylbenzene	LC 50 (Rat, 4 h): 10,200 mg/m ³
Ethylbenzene	LC 50 (Rat): 55 mg/l
Methanol	LC 50 (Rat, 4 h): 64000 ppm
Cumene	LC 50 (Mouse, 7 h): 10 mg/l

Repeated dose toxicity**Product:** No data available.**Skin Corrosion/Irritation****Product:** No data available.**Specified substance(s):**

Benzene, dimethyl- in vivo (Rabbit): Experimental result, Weight of Evidence study

Serious Eye Damage/Eye Irritation**Product:** No data available.**Specified substance(s):**

Aromatic petroleum distillates in vivo (Rabbit, 24 - 72 hrs): Not irritating

1,2,4-Trimethylbenzene in vivo (Rabbit, 30 min): Not irritating

Benzene, dimethyl- in vivo (Rabbit, 24 hrs): Moderately irritating

1,3,5-Trimethylbenzene in vivo (Rabbit, 30 min): Not irritating

Ethylbenzene in vivo (Rabbit, 7 d): Slightly irritating

Methanol in vivo (Rabbit, 24 hrs): Not irritating

Cumene in vivo (Rabbit, 24 hrs): Not irritating

Respiratory or Skin Sensitization**Product:** No data available.**Carcinogenicity****Product:** May cause cancer.

**IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:**

Ethylbenzene	Overall evaluation: Possibly carcinogenic to humans.
Cumene	Overall evaluation: Possibly carcinogenic to humans.

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

Cumene	Reasonably Anticipated to be a Human Carcinogen.
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US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050):

No carcinogenic components identified

Germ Cell Mutagenicity**In vitro**

Product:	No data available.
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In vivo

Product:	No data available.
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Reproductive toxicity

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

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

Product:	No data available.
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Aspiration Hazard

Product:	May be fatal if swallowed and enters airways.
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Other effects:	No data available.
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12. Ecological information**Ecotoxicity:****Acute hazards to the aquatic environment:****Fish**

Product:	No data available.
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Specified substance(s):

1,2,4-Trimethylbenzene	LC 50 (Fathead minnow (<i>Pimephales promelas</i>), 96 h): 7.19 - 8.28 mg/l Mortality
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Benzene, dimethyl-	LC 50 (Fathead minnow (<i>Pimephales promelas</i>), 96 h): 42 mg/l Mortality LC 50 (<i>Bryconamericus iheringii</i> , 96 h): 9.94 mg/l Read-across from supporting substance (structural analogue or surrogate), Supporting study LC 50 (<i>Oncorhynchus mykiss</i> , 96 h): 8.05 mg/l Read-across from supporting substance (structural analogue or surrogate), Supporting study LC 50 (<i>Bryconamericus iheringii</i> , 96 h): 6.9 mg/l Read-across from supporting substance (structural analogue or surrogate), Supporting study LC 50 (<i>Oncorhynchus mykiss</i> , 96 h): 7.6 mg/l Read-across from supporting substance (structural analogue or surrogate), Supporting study
1,3,5-Trimethylbenzene	LC 50 (Goldfish (<i>Carassius auratus</i>), 96 h): 9.89 - 15.05 mg/l Mortality
Ethylbenzene	LC 50 (Fathead minnow (<i>Pimephales promelas</i>), 96 h): 9.1 - 15.6 mg/l Mortality
Methanol	LC 50 (Fathead minnow (<i>Pimephales promelas</i>), 96 h): 28,200 mg/l Mortality
Cumene	LC 50 (Fathead minnow (<i>Pimephales promelas</i>), 96 h): 6.04 - 6.61 mg/l Mortality

Aquatic Invertebrates**Product:**

No data available.

Specified substance(s):1,2,4-Trimethylbenzene LC 50 (Scud (*Elasmopus pectinicus*), 24 h): 4.89 - 5.62 mg/l Mortality

Benzene, dimethyl- LC 50 (Water flea (*Daphnia magna*), 24 h): 150 mg/l Mortality
EC 50 (*Daphnia magna*, 48 h): 3.82 mg/l Read-across from supporting substance (structural analogue or surrogate), Supporting study
EC 50 (*Ceriodaphnia dubia*, 48 h): > 3.4 mg/l Read-across from supporting substance (structural analogue or surrogate), Supporting study
IC 50 (*Daphnia magna*, 24 h): 4.7 mg/l Read-across from supporting substance (structural analogue or surrogate), Supporting study
IC 50 (*Daphnia magna*, 24 h): 3.6 mg/l Read-across from supporting substance (structural analogue or surrogate), Supporting study

1,3,5-Trimethylbenzene EC 50 (Water flea (*Daphnia magna*), 24 h): 50 mg/l IntoxicationEthylbenzene LC 50 (Water flea (*Daphnia magna*), 24 h): 190 mg/l Mortality

Methanol LC 50 (Water flea (*Daphnia magna*), 24 h): 3,616 - 6,414 mg/l Mortality
EC 50 (Water flea (*Daphnia magna*), 48 h): > 10,000 mg/l Intoxication
EC 50 (Water flea (*Daphnia magna*), 24 h): > 10,000 mg/l Intoxication
LC 50 (Water flea (*Daphnia magna*), 96 h): > 100 mg/l Mortality
LC 50 (*Oligochaete*, worm (*Lumbriculus variegatus*), 96 h): > 100 mg/l Mortality

Cumene LC 50 (Water flea (*Daphnia magna*), 24 h): 95 mg/l Mortality**Chronic hazards to the aquatic environment:****Fish****Product:**

No data available.

Specified substance(s):



Aromatic petroleum distillates	NOAEL (Daphnia magna, 21 d): 2.6 mg/l read across
Benzene, dimethyl-	NOAEL (Oncorhynchus mykiss, 56 d): > 1.3 mg/l Experimental result, Key study
Methanol	NOAEL (Oryzias latipes, 200 h): 11,850 mg/l experimental result
Cumene	NOAEL (Danio rerio and Pimephales promelas, 28 d): 0.38 mg/l QSAR
Aquatic Invertebrates	
Product:	No data available.
Specified substance(s):	
Benzene, dimethyl-	NOAEL (Ceriodaphnia dubia, 7 d): 1.17 mg/l Read-across from supporting substance (structural analogue or surrogate), Key study NOAEL (Daphnia magna, 21 d): 1.57 mg/l Read-across from supporting substance (structural analogue or surrogate), Supporting study LOAEL (Daphnia magna, 21 d): 3.16 mg/l Read-across from supporting substance (structural analogue or surrogate), Supporting study EC 10 (Daphnia magna, 21 d): 1.91 mg/l Read-across from supporting substance (structural analogue or surrogate), Supporting study EC 50 (Daphnia magna, 21 d): 2.9 mg/l Read-across from supporting substance (structural analogue or surrogate), Supporting study
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.
Specified substance(s):	
Benzene, dimethyl-	Oncorhynchus mykiss, Bioconcentration Factor (BCF): > 5.5 - < 12.2 Aquatic sediment Experimental result, Key study Oncorhynchus mykiss, Bioconcentration Factor (BCF): > 8.1 - < 25.9 Aquatic sediment Experimental result, Key study Oncorhynchus mykiss, Bioconcentration Factor (BCF): > 7.2 - < 24.2 Aquatic sediment Experimental result, Key study Oncorhynchus mykiss, Bioconcentration Factor (BCF): > 7.4 - < 18.5 Aquatic sediment Experimental result, Key study Oncorhynchus mykiss, Bioconcentration Factor (BCF): > 7.7 - < 21.2 Aquatic sediment Experimental result, Key study



Methanol Green algae (*Chlorella fusca vacuolata*), Bioconcentration Factor (BCF): 28,400 (Static)

Partition Coefficient n-octanol / water (log Kow)

Product: No data available.

Specified substance(s):

Benzene, dimethyl- Log Kow: 3.12 - 3.20

Ethylbenzene Log Kow: 3.15

Methanol Log Kow: -0.77

Cumene Log Kow: 3.66

Mobility in Soil: No data available.

Other Adverse Effects: Toxic to aquatic organisms.

13. Disposal considerations

Disposal instructions: Dispose of waste at an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

Contaminated Packaging: No data available.

14. Transport information

TDG:

Not Regulated

CFR / DOT:

Not Regulated

IMDG:

UN1993, FLAMMABLE LIQUID, N.O.S. (Petroleum Distillates), 3, PG III

Further Information:

The above shipping description may not be accurate for all container sizes and all modes of transportation. Please refer to Bill of Lading.

15. Regulatory information

US Federal Regulations

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)



<u>Chemical Identity</u>	<u>Reportable quantity</u>
Sodium glucoheptonate	De minimis concentration: 1.0% One-Time Export Notification only.

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

<u>Chemical Identity</u>	<u>OSHA hazard(s)</u>
Benzene	Blood respiratory tract irritation Central nervous system Flammability Cancer Skin Aspiration Eye

CERCLA Hazardous Substance List (40 CFR 302.4):

<u>Chemical Identity</u>	<u>Reportable quantity</u>
Benzene, dimethyl-	100 lbs.
Ethylbenzene	1000 lbs.
Methanol	5000 lbs.
Cumene	5000 lbs.
Toluene	1000 lbs.
Benzene	10 lbs.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories

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

SARA 302 Extremely Hazardous Substance

None present or none present in regulated quantities.

SARA 304 Emergency Release Notification

<u>Chemical Identity</u>	<u>Reportable quantity</u>
Benzene, dimethyl-	100 lbs.
Ethylbenzene	1000 lbs.
Methanol	5000 lbs.
Cumene	5000 lbs.
Toluene	1000 lbs.
Benzene	10 lbs.

**SARA 311/312 Hazardous Chemical**

<u>Chemical Identity</u>	<u>Threshold Planning Quantity</u>
Aromatic petroleum distillates	500 lbs
1,2,4-Trimethylbenzene	500 lbs
Benzene, dimethyl-	500 lbs
1,3,5-Trimethylbenzene	500 lbs
Ethylbenzene	500 lbs
1,2,3-Trimethylbenzene	500 lbs
Methanol	500 lbs
Cumene	500 lbs

SARA 313 (TRI Reporting)

<u>Chemical Identity</u>
1,2,4-Trimethylbenzene
Benzene, dimethyl-
Ethylbenzene

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

<u>Chemical Identity</u>	<u>Reportable quantity</u>
Benzene, dimethyl-	100 lbs.

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

None present or none present in regulated quantities.

US State Regulations**US. California Proposition 65**

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

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

<u>Chemical Identity</u>
1,2,4-Trimethylbenzene
Benzene, dimethyl-
1,3,5-Trimethylbenzene
Ethylbenzene
1,2,3-Trimethylbenzene

US. Massachusetts RTK - Substance List

<u>Chemical Identity</u>
1,2,4-Trimethylbenzene
Benzene, dimethyl-
1,3,5-Trimethylbenzene
Ethylbenzene
1,2,3-Trimethylbenzene
Crystalline Silica (Quartz)/ Silica Sand
Benzene

**US. Pennsylvania RTK - Hazardous Substances****Chemical Identity**

1,2,4-Trimethylbenzene
Benzene, dimethyl-
1,3,5-Trimethylbenzene
Ethylbenzene
1,2,3-Trimethylbenzene

US. Rhode Island RTK**Chemical Identity**

1,2,4-Trimethylbenzene
Benzene, dimethyl-
Ethylbenzene

Other Regulations:

Regulatory VOC (less water and exempt solvent):	648 g/l
VOC Method 310:	43.25 %

Inventory Status:

Australia AICS:	One or more components in this product are not listed on or exempt from the Inventory.
Canada DSL Inventory List:	All components in this product are listed on or exempt from the Inventory.
EINECS, ELINCS or NLP:	One or more components in this product are not listed on or exempt from the Inventory.
Japan (ENCS) List:	One or more components in this product are not listed on or exempt from the Inventory.
China Inv. Existing Chemical Substances:	One or more components in this product are not listed on or exempt from the Inventory.
Korea Existing Chemicals Inv. (KECI):	One or more components in this product are not listed on or exempt from the Inventory.
Canada NDSL Inventory:	One or more components in this product are not listed on or exempt from the Inventory.
Philippines PICCS:	One or more components in this product are not listed on or exempt from the Inventory.
US TSCA Inventory:	All components in this product are listed on or exempt from the Inventory.
New Zealand Inventory of Chemicals:	One or more components in this product are



not listed on or exempt from the Inventory.

Japan ISHL Listing:

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

Japan Pharmacopoeia Listing:

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

16. Other information, including date of preparation or last revision
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Revision Date: 01/15/2016

Version #: 2.0

Further Information: No data available.

Disclaimer: For Industrial Use Only. Keep out of Reach of Children. The hazard information herein is offered solely for the consideration of the user, subject to their own investigation of compliance with applicable regulations, including the safe use of the product under every foreseeable condition.

