



SAFETY DATA SHEET

1. Identification

Product identifier: Sea Glass Glass Cleaner Professional Grade

Other means of identification

SDS number: RE1000038781

Recommended restrictions

Product Use: Cleaner
Restrictions on use: Not known.

Manufacturer/Importer/Distributor Information

Manufacturer

Company Name: Sprayway, Inc.
Address: 1000 INTEGRAM DR.
Pacific, MO 63069
Telephone: 1-630-628-3000
Fax:

Emergency telephone number: 1-866-836-8855

2. Hazard(s) identification

Hazard Classification

Physical Hazards

Flammable aerosol Category 1

Environmental Hazards

Acute hazards to the aquatic environment Category 3

Chronic hazards to the aquatic environment Category 3

Label Elements

Hazard Symbol:



Signal Word: Danger

Hazard Statement: Extremely flammable aerosol.
Harmful to aquatic life with long lasting effects.



Precautionary Statements

- Prevention:** Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not spray on an open flame or other ignition source. Do not pierce or burn, even after use. Avoid release to the environment.
- Storage:** Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.
- 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 (%)*
Ethanol	64-17-5	1 - <5%
Distillates (petroleum), hydrotreated light	64742-47-8	2.5 - <5%
Propane	74-98-6	1 - <5%
Butane	106-97-8	1 - <5%
Benzoic acid, phenylmethyl ester	120-51-4	1 - <5%
Acetic acid, pentyl ester	628-63-7	0.1 - <1%
Acetic acid, phenylmethyl ester	140-11-4	0 - <0.1%
Phenol, 2,6-bis(1,1-dimethylethyl)-4-methyl-	128-37-0	0 - <0.1%
2-Propanol, 2-methyl-	75-65-0	0 - <0.1%
2-Propanol	67-63-0	0 - <0.1%

* 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:** Move to fresh air.
- Skin Contact:** Remove contaminated clothing and wash the skin thoroughly with soap and water after work.
- Eye contact:** Rinse immediately with plenty of water.

Most important symptoms/effects, acute and delayed

- Symptoms:** No data available.
- Hazards:** No data available.



Indication of immediate medical attention and special treatment needed

Treatment: No data available.

5. Fire-fighting measures

General Fire Hazards: Use water spray to keep fire-exposed containers cool. 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: Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical: Vapors may travel considerable distance to a source of ignition and flash back.

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.

Methods and material for containment and cleaning up: Stop the flow of material, if this is without risk. Absorb with sand or other inert absorbent.

Notification Procedures: ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Stop leak if you can do so without risk.

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: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not spray on an open flame or other ignition source. Do not pierce or burn, even after use.

Conditions for safe storage, including any incompatibilities: Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use. Aerosol Level 1



8. Exposure controls/personal protection

Control Parameters

Occupational Exposure Limits

Chemical Identity	Type	Exposure Limit Values	Source
Ethanol	TWA PEL	1,000 ppm 1,900 mg/m3	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants (09 2006)
	REL	1,000 ppm 1,900 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards (2005)
	PEL	1,000 ppm 1,900 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
	TWA	1,000 ppm 1,900 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)
	TWA	1,000 ppm 1,900 mg/m3	US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A (06 2008)
	STEL	1,000 ppm	US. ACGIH Threshold Limit Values (2009)
	AN ESL	1,880 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)
	ST ESL	10,000 ppb	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)
	AN ESL	1,000 ppb	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)
Distillates (petroleum), hydrotreated light - Non-aerosol. - as total hydrocarbon vapor	TWA	200 mg/m3	US. ACGIH Threshold Limit Values (2008)
	REL	100 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards (2005)
Distillates (petroleum), hydrotreated light - Non-aerosol. - as total hydrocarbon vapor	TWA	200 mg/m3	US. ACGIH Threshold Limit Values (2008)
	ST ESL	3,500 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)
Distillates (petroleum), hydrotreated light	AN ESL	350 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)
	REL	1,000 ppm 1,800 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards (2005)
Propane	PEL	1,000 ppm 1,800 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
	TWA PEL	1,000 ppm 1,800 mg/m3	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants (09 2006)
	TWA	1,000 ppm 1,800 mg/m3	US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A (06 2008)
	TWA	1,000 ppm 1,800 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)
	TWA	1,000 ppm 1,800 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)
Butane	REL	800 ppm 1,900 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards (2005)
	TWA	800 ppm 1,900 mg/m3	US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A (06 2008)
	STEL	1,000 ppm	US. ACGIH Threshold Limit Values (03 2018)
	TWA	800 ppm 1,900 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)
	AN ESL	3,000 ppb	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)



	AN ESL	7,100 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)
	TWA PEL	800 ppm 1,900 mg/m3	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants (09 2006)
	ST ESL	66,000 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)
	ST ESL	28,000 ppb	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)
Acetic acid, pentyl ester	REL	100 ppm 525 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards (2005)
	TWA	50 ppm	US. ACGIH Threshold Limit Values (2008)
	STEL	100 ppm	US. ACGIH Threshold Limit Values (2008)
	STEL	100 ppm 532 mg/m3	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants (09 2006)
	TWA PEL	50 ppm 266 mg/m3	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants (09 2006)
	TWA	100 ppm 525 mg/m3	US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A (06 2008)
	ST ESL	2,700 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)
	ST ESL	500 ppb	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)
	AN ESL	50 ppb	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)
	AN ESL	270 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)
	PEL	100 ppm 525 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
	TWA	100 ppm 525 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)
Acetic acid, phenylmethyl ester	TWA	10 ppm	US. ACGIH Threshold Limit Values (2008)
	TWA PEL	10 ppm 61 mg/m3	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants (09 2006)
	ST ESL	100 ppb	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)
	AN ESL	10 ppb	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)
	ST ESL	610 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)
	AN ESL	61 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)
Phenol, 2,6-bis(1,1-dimethylethyl)-4-methyl-	TWA	10 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)
	TWA	10 mg/m3	US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A (06 2008)
Phenol, 2,6-bis(1,1-dimethylethyl)-4-methyl- - Inhalable fraction and vapor.	TWA	2 mg/m3	US. ACGIH Threshold Limit Values (2008)
Phenol, 2,6-bis(1,1-dimethylethyl)-4-methyl-	REL	10 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards (2005)
	TWA PEL	10 mg/m3	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants (02 2012)
2-Propanol, 2-methyl-	TWA	100 ppm 300 mg/m3	US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A (06 2008)



	STEL	150 ppm	450 mg/m3	US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A (06 2008)
	ST ESL		200 ppb	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)
	AN ESL		20 ppb	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)
	AN ESL		62 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)
	ST ESL		620 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)
	STEL	150 ppm	450 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards (2005)
	TWA	100 ppm	300 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)
	PEL	100 ppm	300 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
	TWA	100 ppm		US. ACGIH Threshold Limit Values (2008)
	STEL	150 ppm	450 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)
	STEL	150 ppm	450 mg/m3	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants (09 2006)
	TWA PEL	100 ppm	300 mg/m3	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants (09 2006)
	REL	100 ppm	300 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards (2005)
2-Propanol	REL	400 ppm	980 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards (2005)
	STEL	400 ppm		US. ACGIH Threshold Limit Values (2008)
	STEL	500 ppm	1,225 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)
	STEL	500 ppm	1,225 mg/m3	US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A (06 2008)
	TWA	400 ppm	980 mg/m3	US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A (06 2008)
	PEL	400 ppm	980 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
	TWA	400 ppm	980 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)
	STEL	500 ppm	1,225 mg/m3	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants (09 2006)
	AN ESL		200 ppb	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)
	ST ESL		2,000 ppb	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)
	STEL	500 ppm	1,225 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards (2005)
	TWA	200 ppm		US. ACGIH Threshold Limit Values (2008)
	TWA PEL	400 ppm	980 mg/m3	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants (09 2006)
	AN ESL		492 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)
	ST ESL		4,920 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)

Biological Limit Values

Chemical Identity	Exposure Limit Values	Source
2-Propanol (acetone):	40 mg/l (Urine)	ACGIH BEL (03 2013)



Sampling time: End of shift at end of work week.)		
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Appropriate Engineering Controls No data available.

Individual protection measures, such as personal protective equipment

General information: Use personal protective equipment as required. Personal protection equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment.

Eye/face protection: Wear goggles/face shield.

Skin Protection
Hand Protection: No data available.

Other: No data available.

Respiratory Protection: In case of inadequate ventilation use suitable respirator. Seek advice from local supervisor.

Hygiene measures: When using do not smoke. Observe good industrial hygiene practices.

9. Physical and chemical properties

Appearance

Physical state: liquid

Form: Spray Aerosol

Color: No data available.

Odor: No data available.

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: -104.44 °C

Evaporation rate: No data available.

Flammability (solid, gas): No data available.

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: 4,826.3301 - 6,205.2816 hPa (20 °C)

Vapor density: No data available.

Density: No data available.

Relative density: No data available.

Solubility(ies)

Solubility in water: No data available.

Solubility (other): No data available.

Partition coefficient (n-octanol/water): No data available.



Auto-ignition temperature: No data available.
Decomposition temperature: No data available.
Viscosity: No data available.

10. Stability and reactivity

Reactivity: No data available.
Chemical Stability: Material is stable under normal conditions.
Possibility of hazardous reactions: No data available.
Conditions to avoid: Avoid heat or contamination.
Incompatible Materials: No data available.
Hazardous Decomposition Products: No data available.

11. Toxicological information

Information on likely routes of exposure

Inhalation: No data available.
Skin Contact: No data available.
Eye contact: No data available.
Ingestion: No data available.

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.

Specified substance(s):

Ethanol LD 50 (Rat): 10,470 mg/kg

Distillates (petroleum), hydrotreated light LD 50 (Rat): > 5,000 mg/kg



Benzoic acid, phenylmethyl ester	LD 50 (Rat): > 2,000 mg/kg
Acetic acid, phenylmethyl ester	LD 50 (Rat): > 2,000 mg/kg LD 50 (Mouse): > 2,000 mg/kg LD 50 (Rat): 2,490 mg/kg
Phenol, 2,6-bis(1,1-dimethylethyl)-4-methyl-	LD 50 (Rat): > 6,000 mg/kg
2-Propanol, 2-methyl-	LD 50: > 2,000 mg/kg
2-Propanol	LD 50 (Rat): 5.84 g/kg

Dermal

Product: Not classified for acute toxicity based on available data.

Specified substance(s):

Ethanol	LD 50 (Rabbit): 17,100 mg/kg
Distillates (petroleum), hydrotreated light	LD 50 (Rabbit): > 2,000 mg/kg
Benzoic acid, phenylmethyl ester	LD 50: > 2,000 mg/kg
Acetic acid, phenylmethyl ester	LD 50 (Rabbit): > 5 g/kg
Phenol, 2,6-bis(1,1-dimethylethyl)-4-methyl-	LD 50 (Rat): > 2,000 mg/kg
2-Propanol, 2-methyl-	LD 50: > 2,000 mg/kg
2-Propanol	LD 50: > 2,000 mg/kg

Inhalation

Product: Not classified for acute toxicity based on available data.

Specified substance(s):

Ethanol	LC 50 (Rat): 124.7 mg/l
Distillates (petroleum), hydrotreated light	LC 50: > 5 mg/l LC 50: > 20 mg/l
Propane	LC 50 (Mouse): 1,237 mg/l
Butane	LC 50 (Mouse): 1,237 mg/l



Benzoic acid, phenylmethyl ester	LC 50: > 20 mg/l LC 50: > 5 mg/l
Acetic acid, phenylmethyl ester	LC Lo (Rat): > 0.766 mg/l
Phenol, 2,6-bis(1,1- dimethylethyl)-4-methyl-	LC 50: > 5 mg/l LC 50: > 20 mg/l
2-Propanol, 2-methyl-	LC 50: < 20 mg/l
2-Propanol	LC 50: > 5 mg/l LC 50: > 20 mg/l

Repeated dose toxicity

Product: No data available.

Specified substance(s):

Ethanol	NOAEL (Rat(Male), Oral, 7 - 14 Weeks): 10 %(m) Oral Experimental result, Key study
Distillates (petroleum), hydrotreated light	NOAEL (Rat(Female, Male), Inhalation): >= 24 mg/m3 Inhalation Experimental result, Key study NOAEL (Rat(Female), Oral, 70 - 147 d): 750 mg/kg Oral Experimental result, Key study
Propane	NOAEL (Rat(Female, Male), Inhalation, >= 28 d): 4,000 ppm(m) Inhalation Experimental result, Key study LOAEL (Rat(Female, Male), Inhalation, >= 28 d): 12,000 ppm(m) Inhalation Experimental result, Key study
Butane	NOAEL (Rat(Female, Male), Inhalation, >= 28 d): 4,000 ppm(m) Inhalation Experimental result, Key study LOAEL (Rat(Female, Male), Inhalation, >= 28 d): 12,000 ppm(m) Inhalation Experimental result, Key study
Benzoic acid, phenylmethyl ester	NOAEL (Rat(Female, Male), Dermal, 4 Weeks): 781 mg/kg Dermal Experimental result, Key study
Acetic acid, phenylmethyl ester	NOAEL (Rat(Male), Oral, 13 Weeks): 900 mg/kg Oral Experimental result, Supporting study NOAEL (Rat(Female), Oral, 13 Weeks): 480 mg/kg Oral Experimental result, Supporting study
Phenol, 2,6-bis(1,1- dimethylethyl)-4-methyl- 2-Propanol	NOAEL (Rat(Male), Oral, 1.25 - 22.75 Months): 25 mg/kg Oral Experimental result, Key study NOAEL (Rat, Inhalation, >= 104 Weeks): 5,000 ppm(m) Inhalation Experimental result, Key study

Skin Corrosion/Irritation

Product: No data available.

Specified substance(s):

Ethanol	in vivo (Rabbit): Not irritant Experimental result, Key study
Distillates (petroleum), hydrotreated light	in vivo (Rabbit): Not irritant Experimental result, Key study



Benzoic acid, phenylmethyl ester	in vivo (Rabbit): Not irritant Experimental result, Key study
Acetic acid, phenylmethyl ester	in vivo (Rabbit): Not irritant Experimental result, Key study
Phenol, 2,6-bis(1,1- dimethylethyl)-4- methyl-	in vivo (Rabbit): Not irritant Experimental result, Key study
2-Propanol	in vivo (Rabbit): Not Classified Experimental result, Key study

Serious Eye Damage/Eye Irritation

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

Ethanol	Rabbit, 1 - 24 hrs: Not irritating
Distillates (petroleum), hydrotreated light	Rabbit, 24 - 72 hrs: Not irritating
Phenol, 2,6-bis(1,1- dimethylethyl)-4- methyl-	Rabbit, 24 - 72 hrs: Not irritating
2-Propanol	Rabbit, 1 d: Irritating.

Respiratory or Skin Sensitization

Product: No data available.

Specified substance(s):

Ethanol	Skin sensitization:, in vivo (Guinea pig): Non sensitising
Distillates (petroleum), hydrotreated light	Skin sensitization:, in vivo (Guinea pig): Non sensitising
Acetic acid, phenylmethyl ester	Skin sensitization:, in vivo (Guinea pig): Sensitising
Phenol, 2,6-bis(1,1- dimethylethyl)-4- methyl-	Skin sensitization:, in vivo (Human): Non sensitising Skin sensitization:, in vivo (Guinea pig): Non sensitising
2-Propanol	Skin sensitization:, in vivo (Guinea pig): Non sensitising

Carcinogenicity

Product: No data available.

IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:

No carcinogenic components identified

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

No carcinogenic components identified

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

No carcinogenic components identified

Germ Cell Mutagenicity

In vitro



Product: No data available.

In vivo Product: No data available.

Reproductive toxicity Product: No data available.

Specific Target Organ Toxicity - Single Exposure

Product: No data available.

Specified substance(s):
2-Propanol, 2-methyl- Inhalation - dust and mist: Respiratory tract irritation. - Category 3 with respiratory tract irritation.

Specific Target Organ Toxicity - Repeated Exposure

Product: No data available.

Aspiration Hazard

Product: No data available.

Specified substance(s):
Distillates (petroleum), hydrotreated light May be fatal if swallowed and enters airways.

Other effects: No data available.

12. Ecological information

Ecotoxicity:

Acute hazards to the aquatic environment:

Fish

Product: No data available.

Specified substance(s):

Ethanol	LC 50 (Pimephales promelas, 96 h): 15.3 g/l Experimental result, Key study
Distillates (petroleum), hydrotreated light	LC 50 (Rainbow trout,donaldson trout (Oncorhynchus mykiss), 96 h): 2.9 mg/l Mortality NOAEL (Oncorhynchus mykiss, 96 h): 2 mg/l Experimental result, Key study
Propane	LC 50 (Various, 96 h): 147.54 mg/l QSAR QSAR, Key study
Butane	LC 50 (Various, 96 h): 147.54 mg/l QSAR QSAR, Key study
Benzoic acid, phenylmethyl ester	LC 50 (Danio rerio, 96 h): 2.32 mg/l Experimental result, Key study



Acetic acid, pentyl ester	LC 50 (Western mosquitofish (<i>Gambusia affinis</i>), 96 h): 65 mg/l Mortality
Acetic acid, phenylmethyl ester	LC 50 (Medaka, high-eyes (<i>Oryzias latipes</i>), 96 h): 3.48 - 4.6 mg/l Mortality LC 50 (<i>Oryzias latipes</i> , 96 h): 4 mg/l Other, Key study
Phenol, 2,6-bis(1,1-dimethylethyl)-4-methyl-	LC 50 (<i>Pimephales promelas</i> , 96 h): 0.363 mg/l
2-Propanol, 2-methyl-	LC 50 (<i>Pimephales promelas</i> , 96 h): > 961 mg/l Experimental result, Key study NOAEL (<i>Pimephales promelas</i> , 96 h): 961 mg/l Experimental result, Key study
2-Propanol	LC 50 (<i>Pimephales promelas</i> , 96 h): 9,640 mg/l Experimental result, Key study

Aquatic Invertebrates

Product:

No data available.

Specified substance(s):

Ethanol	LC 50 (<i>Ceriodaphnia dubia</i> , 48 h): 5,012 mg/l Experimental result, Key study
Distillates (petroleum), hydrotreated light	EC 50 (<i>Daphnia magna</i> , 24 h): 4.6 mg/l Experimental result, Key study NOAEL (<i>Daphnia magna</i> , 48 h): 0.3 mg/l Experimental result, Key study EC 50 (<i>Daphnia magna</i> , 48 h): 1.4 mg/l Experimental result, Key study
Butane	LC 50 (<i>Daphnia</i> sp., 48 h): 69.43 mg/l QSAR QSAR, Key study
Benzoic acid, phenylmethyl ester	LC 50 (<i>Daphnia magna</i> , 48 h): 7.77 mg/l Experimental result, Key study NOAEL (<i>Daphnia magna</i> , 48 h): 1.73 mg/l Experimental result, Key study
Acetic acid, pentyl ester	LC 50 (Water flea (<i>Daphnia magna</i>), 24 h): 210 mg/l Mortality
Acetic acid, phenylmethyl ester	EC 50 (<i>Daphnia magna</i> , 24 h): 25 mg/l Experimental result, Key study EC 50 (<i>Daphnia magna</i> , 48 h): 17 mg/l Experimental result, Key study NOAEL (<i>Daphnia magna</i> , 48 h): 10 mg/l Experimental result, Key study
Phenol, 2,6-bis(1,1-dimethylethyl)-4-methyl-	EC 50 (<i>Daphnia magna</i> , 48 h): 0.61 mg/l Experimental result, Key study NOAEL (<i>Daphnia magna</i> , 48 h): 0.15 mg/l Experimental result, Key study
2-Propanol, 2-methyl-	NOAEL (<i>Daphnia magna</i> , 48 h): 180 mg/l Experimental result, Key study EC 50 (<i>Daphnia magna</i> , 48 h): 933 mg/l Experimental result, Key study
2-Propanol	LC 50 (<i>Daphnia magna</i> , 24 h): > 10,000 mg/l Experimental result, Key study

Chronic hazards to the aquatic environment:

Fish

Product:

No data available.

Specified substance(s):

Ethanol	NOAEL (<i>Oryzias latipes</i>): 7,900 mg/l Read-across from supporting substance (structural analogue or surrogate), Supporting study
Distillates (petroleum), hydrotreated light	NOAEL (<i>Oncorhynchus mykiss</i>): 0.098 mg/l QSAR QSAR, Key study
2-Propanol, 2-methyl-	NOAEL (<i>Clarias gariepinus</i>): 332 mg/l Experimental result, Key study



Aquatic Invertebrates

Product: No data available.

Specified substance(s):

Ethanol LC 50 (Daphnia magna): 454 mg/l Experimental result, Key study
NOAEL (Daphnia magna): 9.6 mg/l Experimental result, Key study

Distillates (petroleum),
hydrotreated light NOAEL (Daphnia magna): 1.2 mg/l Experimental result, Key study
EC 50 (Daphnia magna): 0.81 mg/l Experimental result, Key study

Benzoic acid,
phenylmethyl ester NOAEL (Daphnia magna): 0.258 mg/l Experimental result, Key study
LOAEL (Daphnia magna): 0.455 mg/l Experimental result, Key study

Phenol, 2,6-bis(1,1-
dimethylethyl)-4-methyl- NOAEL (Daphnia magna): 0.316 mg/l Experimental result, Key study

Toxicity to Aquatic Plants

Product: No data available.

Persistence and Degradability

Biodegradation

Product: No data available.

Specified substance(s):

Ethanol 95 % Detected in water. Experimental result, Key study

Distillates (petroleum),
hydrotreated light 61 % Detected in water. Experimental result, Supporting study

Propane 100 % (385.5 h) Detected in water. Experimental result, Key study
50 % (3.19 d) Detected in water. QSAR, Weight of Evidence study

Butane 100 % (385.5 h) Detected in water. Experimental result, Key study
50 % (3.19 d) Detected in water. QSAR, Weight of Evidence study

Benzoic acid,
phenylmethyl ester 94 % (28 d) Detected in water. Experimental result, Key study

Acetic acid, phenylmethyl
ester 100 % (28 d) Detected in water. Experimental result, Key study

Phenol, 2,6-bis(1,1-
dimethylethyl)-4-methyl- 4.5 % (28 d) Detected in water. Experimental result, Key study

2-Propanol, 2-methyl- 2.6 - 5.1 % (29 d) Detected in water. Experimental result, Key study

2-Propanol 53 % (5 d) Detected in water. Experimental result, Key study

BOD/COD Ratio

Product: No data available.

Bioaccumulative potential

Bioconcentration Factor (BCF)

Product: No data available.

Specified substance(s):



Ethanol	Cyprinus carpio, Bioconcentration Factor (BCF): 4.5 Aquatic sediment Read-across from supporting substance (structural analogue or surrogate), Supporting study
Benzoic acid, phenylmethyl ester	Bioconcentration Factor (BCF): 193.4 Aquatic sediment QSAR, Key study
Acetic acid, phenylmethyl ester	Bioconcentration Factor (BCF): 8 Aquatic sediment Estimated by calculation, Key study
Phenol, 2,6-bis(1,1-dimethylethyl)-4-methyl-	Cyprinus carpio, Bioconcentration Factor (BCF): 330 - 1,800 Aquatic sediment Experimental result, Key study

Partition Coefficient n-octanol / water (log Kow)

Product: No data available.

Specified substance(s):
Phenol, 2,6-bis(1,1-dimethylethyl)-4-methyl- Log Kow: 5.11 - 5.2 No Experimental result, Weight of Evidence study

Mobility in soil: No data available.

Known or predicted distribution to environmental compartments

Ethanol	No data available.
Distillates (petroleum), hydrotreated light	No data available.
Propane	No data available.
Butane	No data available.
Benzoic acid, phenylmethyl ester	No data available.
Acetic acid, pentyl ester	No data available.
Acetic acid, phenylmethyl ester	No data available.
Phenol, 2,6-bis(1,1-dimethylethyl)-4-methyl-	No data available.
2-Propanol, 2-methyl-	No data available.
2-Propanol	No data available.

Other adverse effects: Harmful to aquatic life with long lasting effects.

13. Disposal considerations

Disposal instructions: Discharge, treatment, or disposal may be subject to national, state, or local laws.

Contaminated Packaging: No data available.

14. Transport information

DOT

UN Number:	UN 1950
UN Proper Shipping Name:	Aerosols, flammable
Transport Hazard Class(es)	
Class:	2.1
Label(s):	-



Packing Group: II
Marine Pollutant: No

Environmental Hazards: No
Marine Pollutant: No

Special precautions for user: Not regulated.

IMDG

UN Number: UN 1950
UN Proper Shipping Name: Aerosols, flammable
Transport Hazard Class(es)
Class: 2
Label(s): -
EmS No.:
Packing Group: -

Environmental Hazards: No
Marine Pollutant: No

Special precautions for user: Not regulated.

IATA

UN Number: UN 1950
Proper Shipping Name: Aerosols, flammable
Transport Hazard Class(es):
Class: 2.1
Label(s): -
Packing Group: -

Environmental Hazards: No
Marine Pollutant: No

Special precautions for user: Not regulated.

15. Regulatory information

US Federal Regulations

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

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):

<u>Chemical Identity</u>	<u>Reportable quantity</u>
Ethanol	lbs. 100
Propane	lbs. 100
Butane	lbs. 100
Acetic acid, pentyl ester	lbs. 5000
2-Propanol, 2-methyl-	lbs. 100
2-Propanol	lbs. 100

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories

- Fire Hazard
- Flammable aerosol



SARA 302 Extremely Hazardous Substance

<u>Chemical Identity</u>	<u>Reportable quantity</u>	<u>Threshold Planning Quantity</u>
Distillates (petroleum), hydrotreated light		

SARA 304 Emergency Release Notification

<u>Chemical Identity</u>	<u>Reportable quantity</u>
Ethanol	lbs. 100
Distillates (petroleum), hydrotreated light	
Propane	lbs. 100
Butane	lbs. 100
Acetic acid, pentyl ester	lbs. 5000
2-Propanol, 2-methyl-	lbs. 100
2-Propanol	lbs. 100

SARA 311/312 Hazardous Chemical

<u>Chemical Identity</u>	<u>Threshold Planning Quantity</u>
Ethanol	10000 lbs
Distillates (petroleum), hydrotreated light	10000 lbs
Propane	10000 lbs
Butane	10000 lbs
Benzoic acid, phenylmethyl ester	10000 lbs
Acetic acid, pentyl ester	10000 lbs
Acetic acid, phenylmethyl ester	10000 lbs
Phenol, 2,6-bis(1,1-dimethylethyl)-4-methyl-	10000 lbs
2-Propanol, 2-methyl-	10000 lbs
2-Propanol	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):
Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3)**

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>
Ethanol
Distillates (petroleum), hydrotreated light
Propane
Butane

US. Massachusetts RTK - Substance List

No ingredient regulated by MA Right-to-Know Law present.

US. Pennsylvania RTK - Hazardous Substances

<u>Chemical Identity</u>
Ethanol



Distillates (petroleum), hydrotreated light
Propane
Butane

US. Rhode Island RTK

No ingredient regulated by RI Right-to-Know Law present.

International regulations

Montreal protocol

Distillates (petroleum),
hydrotreated light

Stockholm convention

Distillates (petroleum),
hydrotreated light

Rotterdam convention

Distillates (petroleum),
hydrotreated light

Kyoto protocol



Inventory Status:

Australia AICS:	On or in compliance with the inventory
Canada DSL Inventory List:	Not in compliance with the inventory.
EINECS, ELINCS or NLP:	Not in compliance with the inventory.
Japan (ENCS) List:	Not in compliance with the inventory.
China Inv. Existing Chemical Substances:	Not in compliance with the inventory.
Korea Existing Chemicals Inv. (KECI):	Not in compliance with the inventory.
Canada NDSL Inventory:	Not in compliance with the inventory.
Philippines PICCS:	Not in compliance with the inventory.
US TSCA Inventory:	On or in compliance with the inventory
New Zealand Inventory of Chemicals:	On or in compliance with the inventory
Japan ISHL Listing:	Not in compliance with the inventory.
Japan Pharmacopoeia Listing:	Not in compliance with the inventory.
Mexico INSQ:	Not in compliance with the inventory.
Ontario Inventory:	Not in compliance with the inventory.
Taiwan Chemical Substance Inventory:	On or in compliance with the inventory

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

Issue Date:	06/21/2019
Revision Information:	No data available.
Version #:	1.0
Further Information:	No data available.
Disclaimer:	This information is provided without warranty. The information is believed to be correct. This information should be used to make an independent determination of the methods to safeguard workers and the environment.