SAFETY DATA SHEET

1. Identification

Product identifier **Gunk Engine Cleaner - Foamy**

Other means of identification

SDS number FEB1

Part No. FEB1, FEB1/6

Tariff code 3402.20.5100

Recommended use Engine Cleaner

Recommended restrictions None known.

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

Company name Blumenthal Brands Integrated, LLC

Address 600 Radiator Road
Indian Trail, NC 28079

Telephone Customer Service/ Technical (704) 821-7643

Website www.solvewithB.com

E-mail sds@solvewithB.com

Emergency phone number INFOTRAC (United States) (800) 535-5053
INFOTRAC (International) (352) 323-3500

2. Hazard(s) identification

Physical hazards	Flammable aerosols	Classification not possible
Health hazards	Acute toxicity, oral	Category 4
	Skin corrosion/irritation	Category 2
	Germ cell mutagenicity	Category 1B
	Carcinogenicity	Category 1A
	Aspiration hazard	Category 1
Environmental hazards	Hazardous to the aquatic environment, acute hazard	Category 3
	Hazardous to the aquatic environment, long-term hazard	Category 3

OSHA defined hazards Not classified.

Label elements

Signal word Danger

Hazard statement Pressurized container: May burst if heated. May be fatal if swallowed and enters airways. Causes skin irritation. May cause an allergic skin reaction. May cause genetic defects. May cause cancer. Harmful to aquatic life. Harmful to aquatic life with long lasting effects.

Precautionary statement

Prevention Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Do not spray on an open flame or other ignition source. Pressurized container: Do not pierce or burn, even after use. Avoid breathing mist/vapor. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Contaminated work clothing must not be allowed out of the workplace. Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/face protection.

Response	If swallowed: Immediately call a poison center/doctor. Rinse mouth. Do NOT induce vomiting. If on skin: Wash with plenty of water. If exposed or concerned: Get medical advice/attention. If skin irritation or rash occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse.
Storage	Store locked up. Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.
Disposal	Dispose of contents/container in accordance with local/regional/national/international regulations.
Hazard(s) not otherwise classified (HNOC)	GHS Level 3 Non-flammable aerosol (version 7 - July 2017)
Supplemental information	NOTE: This product is a consumer product and is labeled in accordance with the US Consumer Product Safety Commission regulations which take precedence over OSHA Hazard Communication labeling. The container label may not include the OSHA label elements listed in this document. Always carefully review the entire SDS and the product label prior to use in the workplace.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
Water		7732-18-5	70 - < 80
Petroleum Gases, Liquefied, Sweetened		68476-86-8	5 - < 10
C9-15 Heavy Aromatic Hydrocarbons		64742-94-5	3 - < 5
Kerosene		8008-20-6	1 - < 3
1,2,3,5-tetramethylbenzene		527-53-7	< 1
1,4-diethylbenzene		105-05-5	< 1
Butoxyethanol		111-76-2	< 1
Morpholine		110-91-8	< 1
Oleic Acid		112-80-1	< 1
Sodium Glucoheptonate		31138-65-5	< 1
Tert-butylbenzene		98-06-6	< 1
1,2,3,4-tetramethylbenzene		488-23-3	< 0.3
Naphthalene		91-20-3	< 0.3
1,2,3-Trimethylbenzene		526-73-8	< 0.2
1,2,4-Trimethylbenzene		95-63-6	< 0.2
1h-indene, 2,3-dihydro-		496-11-7	< 0.2
3-propyltoluene		1074-43-7	< 0.2
Triethanolamine		102-71-6	< 0.2
Benzene, 1,3-diethyl-		141-93-5	< 0.1
Cumene		98-82-8	< 0.1
Diethanolamine		111-42-2	< 0.1
Diethylbenzene		25340-17-4	< 0.1
Ethylenediamine		107-15-3	< 0.1
Methoxyethanol		109-86-4	< 0.1
N-Ethylmorpholine		100-74-3	< 0.1

*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. First-aid measures

Inhalation	Move to fresh air. Call a physician if symptoms develop or persist.
Skin contact	Remove contaminated clothing immediately and wash skin with soap and water. In case of eczema or other skin disorders: Seek medical attention and take along these instructions. Wash contaminated clothing before reuse.
Eye contact	Rinse with water. Get medical attention if irritation develops and persists.
Ingestion	Call a physician or poison control center immediately. Rinse mouth. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.

Most important symptoms/effects, acute and delayed	Aspiration may cause pulmonary edema and pneumonitis. Skin irritation. May cause redness and pain. May cause an allergic skin reaction. Dermatitis. Rash.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically. Keep victim warm. Keep victim under observation. Symptoms may be delayed.
General information	IF exposed or concerned: Get medical advice/attention. If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. Wash contaminated clothing before reuse.

5. Fire-fighting measures

Suitable extinguishing media	Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards arising from the chemical	Contents under pressure. Pressurized container may explode when exposed to heat or flame. During fire, gases hazardous to health may be formed.
Special protective equipment and precautions for firefighters	Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.
Fire fighting equipment/instructions	Move containers from fire area if you can do so without risk. Containers should be cooled with water to prevent vapor pressure build up. For massive fire in cargo area, use unmanned hose holder or monitor nozzles, if possible. If not, withdraw and let fire burn out.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials. Move containers from fire area if you can do so without risk. In the event of fire and/or explosion do not breathe fumes.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Avoid breathing mist/vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.
Methods and materials for containment and cleaning up	Refer to attached safety data sheets and/or instructions for use. Stop leak if you can do so without risk. Move the cylinder to a safe and open area if the leak is irreparable. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material. Prevent product from entering drains. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water. Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. Put material in suitable, covered, labeled containers. For waste disposal, see section 13 of the SDS.
Environmental precautions	Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Pressurized container: Do not pierce or burn, even after use. Do not use if spray button is missing or defective. Do not spray on a naked flame or any other incandescent material. Do not smoke while using or until sprayed surface is thoroughly dry. Do not cut, weld, solder, drill, grind, or expose containers to heat, flame, sparks, or other sources of ignition. All equipment used when handling the product must be grounded. Do not re-use empty containers. Do not taste or swallow. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. When using, do not eat, drink or smoke. Should be handled in closed systems, if possible. Use only in well-ventilated areas. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Avoid release to the environment. Observe good industrial hygiene practices.
Conditions for safe storage, including any incompatibilities	Level 1 Aerosol. Store locked up. Pressurized container. Protect from sunlight and do not expose to temperatures exceeding 50°C/122 °F. Do not puncture, incinerate or crush. Do not handle or store near an open flame, heat or other sources of ignition. This material can accumulate static charge which may cause spark and become an ignition source. Store in tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit. At this time, the other constituents have no known exposure limits.

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value
Butoxyethanol (CAS 111-76-2)	PEL	240 mg/m3
		50 ppm
C9-15 Heavy Aromatic Hydrocarbons (CAS 64742-94-5)	PEL	400 mg/m3
		100 ppm
Cumene (CAS 98-82-8)	PEL	245 mg/m3
		50 ppm
Ethylenediamine (CAS 107-15-3)	PEL	25 mg/m3
		10 ppm
Methoxyethanol (CAS 109-86-4)	PEL	80 mg/m3
		25 ppm
Morpholine (CAS 110-91-8)	PEL	70 mg/m3
		20 ppm
Naphthalene (CAS 91-20-3)	PEL	50 mg/m3
		10 ppm
N-Ethylmorpholine (CAS 100-74-3)	PEL	94 mg/m3
		20 ppm

US. ACGIH Threshold Limit Values

Components	Type	Value	Form
1,2,3-Trimethylbenzene (CAS 526-73-8)	TWA	25 ppm	
1,2,4-Trimethylbenzene (CAS 95-63-6)	TWA	25 ppm	
Butoxyethanol (CAS 111-76-2)	TWA	20 ppm	
C9-15 Heavy Aromatic Hydrocarbons (CAS 64742-94-5)	TWA	200 mg/m3	Non-aerosol.
Cumene (CAS 98-82-8)	TWA	50 ppm	
Diethanolamine (CAS 111-42-2)	TWA	1 mg/m3	Inhalable fraction and vapor.
Ethylenediamine (CAS 107-15-3)	TWA	10 ppm	
Kerosene (CAS 8008-20-6)	TWA	200 mg/m3	Non-aerosol.
Methoxyethanol (CAS 109-86-4)	TWA	0.1 ppm	
Morpholine (CAS 110-91-8)	TWA	20 ppm	
Naphthalene (CAS 91-20-3)	TWA	10 ppm	
N-Ethylmorpholine (CAS 100-74-3)	TWA	5 ppm	
Triethanolamine (CAS 102-71-6)	TWA	5 mg/m3	

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value
1,2,3-Trimethylbenzene (CAS 526-73-8)	TWA	125 mg/m3
		25 ppm
1,2,4-Trimethylbenzene (CAS 95-63-6)	TWA	125 mg/m3
		25 ppm
Butoxyethanol (CAS 111-76-2)	TWA	24 mg/m3
		5 ppm
Cumene (CAS 98-82-8)	TWA	245 mg/m3
		50 ppm
Diethanolamine (CAS 111-42-2)	TWA	15 mg/m3
		3 ppm
Ethylenediamine (CAS 107-15-3)	TWA	25 mg/m3
		10 ppm
Kerosene (CAS 8008-20-6)	TWA	100 mg/m3
Methoxyethanol (CAS 109-86-4)	TWA	0.3 mg/m3
		0.1 ppm
Morpholine (CAS 110-91-8)	STEL	105 mg/m3
		30 ppm
	TWA	70 mg/m3
		20 ppm
Naphthalene (CAS 91-20-3)	STEL	75 mg/m3
		15 ppm
	TWA	50 mg/m3
		10 ppm
N-Ethylmorpholine (CAS 100-74-3)	TWA	23 mg/m3
		5 ppm

US. Workplace Environmental Exposure Level (WEEL) Guides

Components	Type	Value
1,4-diethylbenzene (CAS 105-05-5)	TWA	5 ppm
Benzene, 1,3-diethyl- (CAS 141-93-5)	TWA	5 ppm
Diethylbenzene (CAS 25340-17-4)	TWA	5 ppm

Biological limit values

ACGIH Biological Exposure Indices

Components	Value	Determinant	Specimen	Sampling Time
Butoxyethanol (CAS 111-76-2)	200 mg/g	Butoxyacetic acid (BAA), with hydrolysis	Creatinine in urine	*
Methoxyethanol (CAS 109-86-4)	1 mg/g	2-Methoxyacetic acid	Creatinine in urine	*

* - For sampling details, please see the source document.

Exposure guidelines

US - California OELs: Skin designation

Butoxyethanol (CAS 111-76-2)	Can be absorbed through the skin.
Cumene (CAS 98-82-8)	Can be absorbed through the skin.
Diethanolamine (CAS 111-42-2)	Can be absorbed through the skin.
Methoxyethanol (CAS 109-86-4)	Can be absorbed through the skin.
Morpholine (CAS 110-91-8)	Can be absorbed through the skin.
Naphthalene (CAS 91-20-3)	Can be absorbed through the skin.
N-Ethylmorpholine (CAS 100-74-3)	Can be absorbed through the skin.

US - Minnesota Haz Subs: Skin designation applies

Butoxyethanol (CAS 111-76-2)	Skin designation applies.
Cumene (CAS 98-82-8)	Skin designation applies.
Methoxyethanol (CAS 109-86-4)	Skin designation applies.
Morpholine (CAS 110-91-8)	Skin designation applies.
N-Ethylmorpholine (CAS 100-74-3)	Skin designation applies.

US - Tennessee OELs: Skin designation

Butoxyethanol (CAS 111-76-2)	Can be absorbed through the skin.
Cumene (CAS 98-82-8)	Can be absorbed through the skin.
Methoxyethanol (CAS 109-86-4)	Can be absorbed through the skin.
Morpholine (CAS 110-91-8)	Can be absorbed through the skin.
N-Ethylmorpholine (CAS 100-74-3)	Can be absorbed through the skin.

US ACGIH Threshold Limit Values: Skin designation

C9-15 Heavy Aromatic Hydrocarbons (CAS 64742-94-5)	Can be absorbed through the skin.
Diethanolamine (CAS 111-42-2)	Can be absorbed through the skin.
Ethylenediamine (CAS 107-15-3)	Can be absorbed through the skin.
Kerosene (CAS 8008-20-6)	Can be absorbed through the skin.
Methoxyethanol (CAS 109-86-4)	Can be absorbed through the skin.
Morpholine (CAS 110-91-8)	Can be absorbed through the skin.
Naphthalene (CAS 91-20-3)	Can be absorbed through the skin.
N-Ethylmorpholine (CAS 100-74-3)	Can be absorbed through the skin.

US NIOSH Pocket Guide to Chemical Hazards: Skin designation

Butoxyethanol (CAS 111-76-2)	Can be absorbed through the skin.
Cumene (CAS 98-82-8)	Can be absorbed through the skin.
Methoxyethanol (CAS 109-86-4)	Can be absorbed through the skin.
Morpholine (CAS 110-91-8)	Can be absorbed through the skin.
N-Ethylmorpholine (CAS 100-74-3)	Can be absorbed through the skin.

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Butoxyethanol (CAS 111-76-2)	Can be absorbed through the skin.
Cumene (CAS 98-82-8)	Can be absorbed through the skin.
Methoxyethanol (CAS 109-86-4)	Can be absorbed through the skin.
Morpholine (CAS 110-91-8)	Can be absorbed through the skin.
N-Ethylmorpholine (CAS 100-74-3)	Can be absorbed through the skin.

Appropriate engineering controls

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 eyewash station and safety shower.

Individual protection measures, such as personal protective equipment

Eye/face protection

Chemical respirator with organic vapor cartridge and full facepiece.

Skin protection

Hand protection

Wear appropriate chemical resistant gloves.

Other

Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended.

Respiratory protection

Chemical respirator with organic vapor cartridge and full facepiece. Chemical respirator with organic vapor cartridge and full facepiece if threshold limits are exceeded.

Thermal hazards

Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations

Observe any medical surveillance requirements. When using do not smoke. Keep away from food and drink. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Contaminated work clothing should not be allowed out of the workplace.

9. Physical and chemical properties

Appearance	Liquid Hazy
Physical state	Liquid.
Form	Aerosol.
Color	Cream
Odor	Sweet. Aromatic.
Odor threshold	Not available.
pH	9 - 10
Melting point/freezing point	Not available.
Initial boiling point and boiling range	Not available.
Flash point	> 201.0 °F (> 93.9 °C) Tag Closed Cup
Evaporation rate	Not available.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	
Flammability limit - lower (%)	Not available.
Flammability limit - upper (%)	Not available.
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	348.27662 hPa estimated
Vapor density	Not available.
Relative density	Not available.
Solubility(ies)	
Solubility (water)	Not available.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.
Other information	
Density	8.17 lbs/gal
Explosive properties	Not explosive.
Flammability (flash back)	No
Flammability class	Combustible IIIB estimated
Heat of combustion (NFPA 30B)	2.41 kJ/g estimated
Oxidizing properties	Not oxidizing.
Percent volatile	83.6 % estimated
Specific gravity	0.85
VOC	17.06 %

10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	Hazardous polymerization does not occur.
Conditions to avoid	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. Avoid temperatures exceeding the flash point. Contact with incompatible materials.
Incompatible materials	Strong oxidizing agents.

Hazardous decomposition products No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

Inhalation Prolonged inhalation may be harmful.

Skin contact Causes skin irritation. May cause an allergic skin reaction.

Eye contact Direct contact with eyes may cause temporary irritation.

Ingestion Harmful if swallowed. Droplets of the product aspirated into the lungs through ingestion or vomiting may cause a serious chemical pneumonia.

Symptoms related to the physical, chemical and toxicological characteristics Aspiration may cause pulmonary edema and pneumonitis. Skin irritation. May cause redness and pain. May cause an allergic skin reaction. Dermatitis. Rash.

Information on toxicological effects

Acute toxicity May be fatal if swallowed and enters airways.

Components	Species	Test Results
1,2,3-Trimethylbenzene (CAS 526-73-8)		
Acute		
Oral		
LD50	Rat	8970 mg/kg
1,2,4-Trimethylbenzene (CAS 95-63-6)		
Acute		
Dermal		
LD50	Rabbit	> 3160 mg/kg
Oral		
LD50	Rat	6 g/kg
Butoxyethanol (CAS 111-76-2)		
Acute		
Dermal		
LD50	Rabbit	1060 mg/kg, 24 Hours
Oral		
LD50	Rat	530 - 2800 mg/kg
C9-15 Heavy Aromatic Hydrocarbons (CAS 64742-94-5)		
Acute		
Dermal		
LD50	Rabbit	> 2000 mg/kg, 24 Hours
Inhalation		
LC50	Rat	< 5.8 mg/l, 4 Hours
Oral		
LD50	Rat	< 5000 mg/kg
		> 25 ml/kg
Cumene (CAS 98-82-8)		
Acute		
Dermal		
LD50	Rabbit	> 3160 mg/kg, 24 Hours
Inhalation		
Vapor		
LC50	Mouse	10 mg/l, 7 Hours
Oral		
LD50	Rat	2260 mg/kg

Components	Species	Test Results
Diethanolamine (CAS 111-42-2)		
Acute		
Oral		
LD50	Rat	710 mg/kg
Ethylenediamine (CAS 107-15-3)		
Acute		
Dermal		
LD50	Rabbit	560 mg/kg, 24 Hours
Inhalation		
Vapor		
LC50	Rat	7.35 mg/l, 8 Hours
Oral		
LD50	Rat	500 mg/kg
Kerosene (CAS 8008-20-6)		
Acute		
Dermal		
LD50	Rabbit	> 2000 mg/kg, 24 Hours
Inhalation		
Vapor		
LC50	Rat	> 0.1 mg/l, 8 Hours
Oral		
LD50	Rat	> 5000 mg/kg
Methoxyethanol (CAS 109-86-4)		
Acute		
Dermal		
LD50	Rabbit	1280 mg/kg
Oral		
LD50	Rat	2257 mg/kg
Morpholine (CAS 110-91-8)		
Acute		
Oral		
LD50	Rat	1.05 g/kg
Naphthalene (CAS 91-20-3)		
Acute		
Dermal		
LD50	Rabbit	> 2 g/kg
Oral		
LD50	Rat	490 mg/kg
N-Ethylmorpholine (CAS 100-74-3)		
Acute		
Oral		
LD50	Rat	1490 - 2120 mg/kg
Oleic Acid (CAS 112-80-1)		
Acute		
Dermal		
LD50	Guinea pig	> 3000 mg/kg
Oral		
LD50	Rat	74 g/kg

Components	Species	Test Results
Sodium Glucoheptonate (CAS 31138-65-5)		
Acute		
Dermal		
LD50	Rat	> 2000 mg/kg, 24 Hours
Oral		
LD50	Rat	> 4040 mg/kg
Triethanolamine (CAS 102-71-6)		
Acute		
Dermal		
LD50	Rabbit	> 2000 mg/kg
Oral		
LD50	Rat	6400 mg/kg

Skin corrosion/irritation Causes skin irritation.

Serious eye damage/eye irritation Direct contact with eyes may cause temporary irritation.

Respiratory or skin sensitization

Respiratory sensitization Not a respiratory sensitizer.

Skin sensitization May cause an allergic skin reaction.

Germ cell mutagenicity May cause genetic defects.

Carcinogenicity May cause cancer.

IARC Monographs. Overall Evaluation of Carcinogenicity

Butoxyethanol (CAS 111-76-2)	3 Not classifiable as to carcinogenicity to humans.
Cumene (CAS 98-82-8)	2B Possibly carcinogenic to humans.
Diethanolamine (CAS 111-42-2)	2B Possibly carcinogenic to humans.
Morpholine (CAS 110-91-8)	3 Not classifiable as to carcinogenicity to humans.
Naphthalene (CAS 91-20-3)	2B Possibly carcinogenic to humans.
Triethanolamine (CAS 102-71-6)	3 Not classifiable as to carcinogenicity to humans.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)

Not regulated.

US. National Toxicology Program (NTP) Report on Carcinogens

Cumene (CAS 98-82-8)	Reasonably Anticipated to be a Human Carcinogen.
Naphthalene (CAS 91-20-3)	Reasonably Anticipated to be a Human Carcinogen.

Reproductive toxicity This product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity - single exposure Not classified.

Specific target organ toxicity - repeated exposure Not classified.

Aspiration hazard May be fatal if swallowed and enters airways.

Chronic effects Prolonged inhalation may be harmful. Prolonged exposure may cause chronic effects.

12. Ecological information

Ecotoxicity Harmful to aquatic life with long lasting effects.

Components		Species	Test Results
1,2,4-Trimethylbenzene (CAS 95-63-6)			
Aquatic			
Fish	LC50	Fathead minnow (Pimephales promelas)	7.19 - 8.28 mg/l, 96 hours
1h-indene, 2,3-dihydro- (CAS 496-11-7)			
Aquatic			
Fish	LC50	Fathead minnow (Pimephales promelas)	14 mg/l, 96 hours
Benzene, 1,3-diethyl- (CAS 141-93-5)			
Aquatic			
Fish	LC50	Fathead minnow (Pimephales promelas)	4.05 - 4.25 mg/l, 96 hours

Components		Species	Test Results
Butoxyethanol (CAS 111-76-2)			
Aquatic			
Fish	LC50	Inland silverside (Menidia beryllina)	1250 mg/l, 96 hours
C9-15 Heavy Aromatic Hydrocarbons (CAS 64742-94-5)			
Aquatic			
Crustacea	EC50	Water flea (Daphnia pulex)	2.7 - 5.1 mg/l, 48 hours
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	8.8 mg/l, 96 hours
			8.8 mg/l, 96 hours
Cumene (CAS 98-82-8)			
Aquatic			
Crustacea	EC50	Brine shrimp (Artemia sp.)	3.55 - 11.29 mg/l, 48 hours
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	2.7 mg/l, 96 hours
Diethanolamine (CAS 111-42-2)			
Aquatic			
Crustacea	EC50	Water flea (Ceriodaphnia dubia)	61.8 - 86.04 mg/l, 48 hours
Fish	LC50	Fathead minnow (Pimephales promelas)	100 mg/l, 96 hours
Ethylenediamine (CAS 107-15-3)			
Aquatic			
Fish	LC50	Fathead minnow (Pimephales promelas)	98.6 - 131.6 mg/l, 96 hours
Methoxyethanol (CAS 109-86-4)			
Aquatic			
Fish	LC50	Bluegill (Lepomis macrochirus)	> 10000 mg/l, 96 hours
Morpholine (CAS 110-91-8)			
Aquatic			
Fish	LC50	Zebra danio (Danio rerio)	> 1 mg/l, 96 hours
Naphthalene (CAS 91-20-3)			
Aquatic			
Crustacea	EC50	Water flea (Daphnia magna)	1.09 - 3.4 mg/l, 48 hours
Fish	LC50	Pink salmon (Oncorhynchus gorbuscha)	1.11 - 1.68 mg/l, 96 hours
Oleic Acid (CAS 112-80-1)			
Aquatic			
Fish	LC50	Fathead minnow (Pimephales promelas)	205 mg/l, 96 hours
Triethanolamine (CAS 102-71-6)			
Aquatic			
Crustacea	EC50	Water flea (Ceriodaphnia dubia)	565.2 - 658.3 mg/l, 48 hours
Fish	LC50	Fathead minnow (Pimephales promelas)	10610 - 13010 mg/l, 96 hours

Persistence and degradability No data is available on the degradability of any ingredients in the mixture.

Bioaccumulative potential

Partition coefficient n-octanol / water (log Kow)

1,4-diethylbenzene	4.45
Benzene, 1,3-diethyl-	4.44
Butoxyethanol	0.81 log Pow, at 25 °C
Cumene	3.66
Diethanolamine	-1.43
Ethylenediamine	-2.04
Methoxyethanol	-0.77
Morpholine	-0.86
Naphthalene	3.3
Tert-butylbenzene	4.11
Triethanolamine	-1

Mobility in soil	No data available.
Other adverse effects	The product contains volatile organic compounds which have a photochemical ozone creation potential.

13. Disposal considerations

Disposal instructions	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Contents under pressure. Do not puncture, incinerate or crush. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.
Local disposal regulations	Dispose in accordance with all applicable regulations.
Hazardous waste code	The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
Waste from residues / unused products	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
Contaminated packaging	Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal. Do not re-use empty containers.

14. Transport information

DOT

UN number	UN1950
UN proper shipping name	Aerosols, flammable, Limited Quantity, Limited Quantity
Transport hazard class(es)	
Class	2.1
Subsidiary risk	-
Packing group	Not available.
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.

IATA

UN number	UN1950
UN proper shipping name	Aerosols, Flammable, Limited Quantity, Limited Quantity
Transport hazard class(es)	
Class	2.1
Subsidiary risk	-
Packing group	Not available.
Environmental hazards	No.
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.

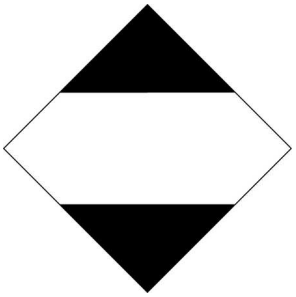
IMDG

UN number	UN1950
UN proper shipping name	Aerosols, Flammable, Limited Quantity (Petroleum Distillates), Limited Quantity
Transport hazard class(es)	
Class	2.1
Subsidiary risk	-
Packing group	Not available.
Environmental hazards	
Marine pollutant	No.
EmS	Not available.
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.

Petroleum Distillates

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not established.

DOT; IMDG



IATA

15. Regulatory information

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

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

Methoxyethanol (CAS 109-86-4)	1.0 % One-Time Export Notification only.
Sodium Glucoheptonate (CAS 31138-65-5)	1.0 % One-Time Export Notification only.

CERCLA Hazardous Substance List (40 CFR 302.4)

Butoxyethanol (CAS 111-76-2)	Listed.
Cumene (CAS 98-82-8)	Listed.
Diethanolamine (CAS 111-42-2)	Listed.
Ethylenediamine (CAS 107-15-3)	Listed.
Methoxyethanol (CAS 109-86-4)	Listed.
Morpholine (CAS 110-91-8)	Listed.
Naphthalene (CAS 91-20-3)	Listed.
N-Ethylmorpholine (CAS 100-74-3)	Listed.

SARA 304 Emergency release notification

Ethylenediamine (CAS 107-15-3)	5000 LBS

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)

Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

Chemical name	CAS number	Reportable quantity (pounds)	Threshold planning quantity (pounds)	Threshold planning quantity, lower value (pounds)	Threshold planning quantity, upper value (pounds)
Ethylenediamine	107-15-3	5000	10000		

SARA 311/312 Hazardous chemical Yes

Classified hazard categories
Acute toxicity (any route of exposure)
Skin corrosion or irritation
Germ cell mutagenicity
Carcinogenicity
Aspiration hazard

SARA 313 (TRI reporting)

Chemical name	CAS number	% by wt.
Butoxyethanol	111-76-2	< 1
Naphthalene	91-20-3	< 0.3

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Cumene (CAS 98-82-8)
Diethanolamine (CAS 111-42-2)
Methoxyethanol (CAS 109-86-4)
Naphthalene (CAS 91-20-3)

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

Ethylenediamine (CAS 107-15-3)

Safe Drinking Water Act (SDWA) Not regulated.

US state regulations

California Proposition 65

California Proposition 65 - CRT: Listed date/Carcinogenic substance

Cumene (CAS 98-82-8)	Listed: April 6, 2010
Diethanolamine (CAS 111-42-2)	Listed: June 22, 2012
Naphthalene (CAS 91-20-3)	Listed: April 19, 2002

California Proposition 65 - CRT: Listed date/Developmental toxin

Methoxyethanol (CAS 109-86-4)	Listed: January 1, 1989

California Proposition 65 - CRT: Listed date/Male reproductive toxin

Methoxyethanol (CAS 109-86-4)	Listed: January 1, 1989

US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))

1,2,3-Trimethylbenzene (CAS 526-73-8)
1,2,4-Trimethylbenzene (CAS 95-63-6)
Butoxyethanol (CAS 111-76-2)
Cumene (CAS 98-82-8)
Diethanolamine (CAS 111-42-2)
Ethylenediamine (CAS 107-15-3)
Kerosene (CAS 8008-20-6)
Methoxyethanol (CAS 109-86-4)
Naphthalene (CAS 91-20-3)
Petroleum Gases, Liquefied, Sweetened (CAS 68476-86-8)
Tert-butylbenzene (CAS 98-06-6)

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	No
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	Yes
China	Inventory of Existing Chemical Substances in China (IECSC)	No
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	No
New Zealand	New Zealand Inventory	No
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	No
Taiwan	Taiwan Chemical Substance Inventory (TCSI)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)
A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

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

Issue date 05-29-2015
Revision date 03-23-2020
Version # 06

HMIS® ratings	Health: 3* Flammability: 0 Physical hazard: 0
NFPA ratings	Health: 2 Flammability: 0 Instability: 0
NFPA ratings	
Disclaimer	The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.
Revision information	Physical & Chemical Properties: Multiple Properties