SAFETY DATA SHEET

1. Identification

Product identifier **HDD17 Gunk Heavy Duty All-Purpose Foaming Degreaser**

Other means of identification

SDS number HDD17

Part No. HDD17/6

Tariff code 3402.20.5100

Recommended use Degreaser

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	Category 2
Health hazards	Serious eye damage/eye irritation	Category 2
	Sensitization, skin	Category 1
	Germ cell mutagenicity	Category 1B
	Carcinogenicity	Category 1B
	Aspiration hazard	Category 1
Environmental hazards	Hazardous to the aquatic environment, acute hazard	Category 1
	Hazardous to the aquatic environment, long-term hazard	Category 1

OSHA defined hazards Not classified.

Label elements

Signal word Danger

Hazard statement Flammable aerosol. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye damage. May cause genetic defects. May cause cancer. Very toxic to aquatic life. Very toxic 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. 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 on skin: Wash with plenty of water. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center/doctor. If skin irritation or rash occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse. Collect spillage.
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)	None known.
Supplemental information	6.75% of the mixture consists of component(s) of unknown acute oral toxicity. 9.75% of the mixture consists of component(s) of unknown acute dermal toxicity. % of the mixture consists of component(s) of unknown acute inhalation toxicity. 11.75% of the mixture consists of component(s) of unknown acute hazards to the aquatic environment. 11.75% of the mixture consists of component(s) of unknown long-term hazards to the aquatic environment. 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	80 - < 90
Propane		74-98-6	5 - < 10
Alcohols, C9-11, ethoxylated		68439-46-3	3 - < 5
Butoxydiglycol		112-34-5	1 - < 3
Distillates (petroleum), Hydrotreated Light	Hydrotreated light distillates (petroleum)	64742-47-8	1 - < 3
1,2,4-Trimethylbenzene		95-63-6	< 1
C9-C15 Heavy Aromatic Hydrocarbons		64742-95-6	< 1
Kerosene		8008-20-6	< 1
Morpholine		110-91-8	< 1
Oleic Acid		112-80-1	< 1
Sodium Gluconate		527-07-1	< 1
Trimethylbenzene		25551-13-7	< 1
Triethanolamine		102-71-6	< 0.3
1,2,3-Trimethylbenzene		526-73-8	< 0.2
1,3,5-Trimethylbenzene		108-67-8	< 0.2
Sodium Nitrite		7632-00-0	< 0.2
Cumene		98-82-8	< 0.1
Cymene		25155-15-1	< 0.1
Diethanolamine		111-42-2	< 0.1
Ethylenediamine		107-15-3	< 0.1
Methoxyethanol		109-86-4	< 0.1
Naphthalene		91-20-3	< 0.1
N-Ethylmorpholine		100-74-3	< 0.1
Toluene		108-88-3	< 0.1
Xylene		1330-20-7	< 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	Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention immediately.
Ingestion	In the unlikely event of swallowing contact a physician or poison control center. Rinse mouth.
Most important symptoms/effects, acute and delayed	Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. 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 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.
General fire hazards	Flammable aerosol.

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. This product is miscible in water. Prevent entry into waterways, sewer, basements or confined areas. 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 get this material in contact with eyes. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Should be handled in closed systems, if possible. Use only in well-ventilated areas. Wear appropriate personal protective equipment. 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
C9-C15 Heavy Aromatic Hydrocarbons (CAS 64742-95-6)	PEL	400 mg/m3
		100 ppm
Cumene (CAS 98-82-8)	PEL	245 mg/m3
		50 ppm
Distillates (petroleum), Hydrotreated Light (CAS 64742-47-8)	PEL	400 mg/m3
		100 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
Propane (CAS 74-98-6)	PEL	1800 mg/m3
		1000 ppm
Xylene (CAS 1330-20-7)	PEL	435 mg/m3
		100 ppm

US. OSHA Table Z-2 (29 CFR 1910.1000)

Components	Type	Value
Toluene (CAS 108-88-3)	Ceiling	300 ppm
	TWA	200 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	
1,3,5-Trimethylbenzene (CAS 108-67-8)	TWA	25 ppm	
Butoxydiglycol (CAS 112-34-5)	TWA	10 ppm	Inhalable fraction and vapor.

US. ACGIH Threshold Limit Values

Components	Type	Value	Form
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	
Toluene (CAS 108-88-3)	TWA	20 ppm	
Triethanolamine (CAS 102-71-6)	TWA	5 mg/m3	
Trimethylbenzene (CAS 25551-13-7)	TWA	25 ppm	
Xylene (CAS 1330-20-7)	STEL	150 ppm	
	TWA	100 ppm	

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
1,3,5-Trimethylbenzene (CAS 108-67-8)	TWA	125 mg/m3
		25 ppm
C9-C15 Heavy Aromatic Hydrocarbons (CAS 64742-95-6)	TWA	400 mg/m3
		100 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

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value
		15 ppm
	TWA	50 mg/m3
		10 ppm
N-Ethylmorpholine (CAS 100-74-3)	TWA	23 mg/m3
		5 ppm
Propane (CAS 74-98-6)	TWA	1800 mg/m3
		1000 ppm
Toluene (CAS 108-88-3)	STEL	560 mg/m3
		150 ppm
	TWA	375 mg/m3
		100 ppm
Trimethylbenzene (CAS 25551-13-7)	TWA	125 mg/m3
		25 ppm
Xylene (CAS 1330-20-7)	STEL	655 mg/m3
		150 ppm
	TWA	435 mg/m3
		100 ppm

Biological limit values

ACGIH Biological Exposure Indices

Components	Value	Determinant	Specimen	Sampling Time
Methoxyethanol (CAS 109-86-4)	1 mg/g	2-Methoxyacetic acid	Creatinine in urine	*
Toluene (CAS 108-88-3)	0.3 mg/g	o-Cresol, with hydrolysis	Creatinine in urine	*
	0.03 mg/l	Toluene	Urine	*
	0.02 mg/l	Toluene	Blood	*
Xylene (CAS 1330-20-7)	1.5 g/g	Methylhippuric acids	Creatinine in urine	*

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

Exposure guidelines

US - California OELs: Skin designation

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.
Toluene (CAS 108-88-3)	Can be absorbed through the skin.

US - Minnesota Haz Subs: 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.
Toluene (CAS 108-88-3)	Skin designation applies.

US - Tennessee OELs: Skin designation

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

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

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)

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. 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 Opaque Liquid

Physical state Liquid.

Form Aerosol.

Color White

Odor hydrocarbon

Odor threshold Not available.

pH 9 - 10

Melting point/freezing point 32 °F (0 °C) estimated

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 (%) 2.4 % estimated

Flammability limit - upper (%) 9.5 % estimated

Explosive limit - lower (%) Not available.

Explosive limit - upper (%) Not available.

Vapor pressure Not available.

Vapor density	Not available.
Relative density	Not available.
Solubility(ies)	
Solubility (water)	Emulsifiable
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	842 °F (450 °C) estimated
Decomposition temperature	Not available.
Viscosity	< 10 cSt
Other information	
Density	8.34 lbs/gal
Explosive properties	Not explosive.
Heat of combustion (NFPA 30B)	7.2 kJ/g estimated
Kinematic viscosity	< 10 cSt
Kinematic viscosity temperature	77 °F (25 °C)
Oxidizing properties	Not oxidizing.
Specific gravity	1
VOC	9.5 % estimated

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	Causes serious eye damage.
Ingestion	Expected to be a low ingestion hazard.
Symptoms related to the physical, chemical and toxicological characteristics	Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. Skin irritation. May cause redness and pain. May cause an allergic skin reaction. Dermatitis. Rash.

Information on toxicological effects

Acute toxicity Not known.

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

Components	Species	Test Results
Oral		
LD50	Rat	6 g/kg
1,3,5-Trimethylbenzene (CAS 108-67-8)		
Acute		
Oral		
LD50	Rat	8970 mg/kg
		3280 mg/kg
Butoxydiglycol (CAS 112-34-5)		
Acute		
Dermal		
LD50	Rabbit	2700 mg/kg
Oral		
LD50	Rat	3306 mg/kg
C9-C15 Heavy Aromatic Hydrocarbons (CAS 64742-95-6)		
Acute		
Dermal		
LD50	Rabbit	> 1900 mg/kg, 24 Hours
Inhalation		
Vapor		
LC50	Rat	> 4.96 mg/l, 4 Hours
Oral		
LD50	Rat	14060 mg/kg
		4820 mg/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
Diethanolamine (CAS 111-42-2)		
Acute		
Oral		
LD50	Rat	710 mg/kg
Distillates (petroleum), Hydrotreated Light (CAS 64742-47-8)		
Acute		
Dermal		
LD50	Rabbit	> 2000 mg/kg, 24 Hours
Inhalation		
Vapor		
LC50	Rat	> 4.5 mg/l, 4 Hours
		> 0.1 mg/l, 8 Hours
Oral		
LD50	Rat	> 5000 mg/kg
Ethylenediamine (CAS 107-15-3)		
Acute		
Dermal		
LD50	Rabbit	560 mg/kg, 24 Hours

Components	Species	Test Results
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
Sodium Nitrite (CAS 7632-00-0)		
Acute		
Oral		
LD50	Rat	85 mg/kg
Toluene (CAS 108-88-3)		
Acute		
Dermal		
LD50	Rabbit	> 5000 mg/kg, 24 Hours
Inhalation		
LC50	Rat	12.5 - 28.8 mg/l, 4 Hours

Components	Species	Test Results
Oral		
LD50	Rat	2.6 g/kg
Triethanolamine (CAS 102-71-6)		
Acute		
Dermal		
LD50	Rabbit	> 2000 mg/kg
Oral		
LD50	Rat	6400 mg/kg
Trimethylbenzene (CAS 25551-13-7)		
Acute		
Oral		
LD50	Rat	8970 mg/kg
Xylene (CAS 1330-20-7)		
Acute		
Dermal		
LD50	Rabbit	12130 mg/kg, 24 Hours
Inhalation		
LC50	Rat	6350 mg/l, 4 Hours
Oral		
LD50	Rat	3523 - 8600 mg/kg

Skin corrosion/irritation Causes skin irritation.

Serious eye damage/eye irritation Causes serious eye damage.

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

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.
Toluene (CAS 108-88-3)	3 Not classifiable as to carcinogenicity to humans.
Triethanolamine (CAS 102-71-6)	3 Not classifiable as to carcinogenicity to humans.
Xylene (CAS 1330-20-7)	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 Not an aspiration hazard.

Chronic effects Prolonged inhalation may be harmful.

12. Ecological information

Ecotoxicity Very toxic 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
1,3,5-Trimethylbenzene (CAS 108-67-8)			
Aquatic			
Fish	LC50	Goldfish (Carassius auratus)	9.89 - 15.05 mg/l, 96 hours
Alcohols, C9-11, ethoxylated (CAS 68439-46-3)			
Aquatic			
Crustacea	EC50	Water flea (Daphnia magna)	2.9 - 8.5 mg/l, 48 hours
Fish	LC50	Fathead minnow (Pimephales promelas)	6 - 12 mg/l, 96 hours
Butoxydiglycol (CAS 112-34-5)			
Aquatic			
Fish	LC50	Bluegill (Lepomis macrochirus)	1300 mg/l, 96 hours
C9-C15 Heavy Aromatic Hydrocarbons (CAS 64742-95-6)			
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
Distillates (petroleum), Hydrotreated Light (CAS 64742-47-8)			
Aquatic			
Crustacea	EC50	Water flea (Daphnia pulex)	2.7 - 5.1 mg/l, 48 hours
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	2.9 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

Components		Species	Test Results
Sodium Nitrite (CAS 7632-00-0)			
Aquatic			
Crustacea	EC50	Greasyback shrimp (Metapenaeus ensis)	16.14 - 26.61 mg/l, 48 hours
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	0.15 - 0.25 mg/l, 96 hours
Toluene (CAS 108-88-3)			
Aquatic			
Crustacea	EC50	Water flea (Daphnia magna)	5.46 - 9.83 mg/l, 48 hours
Fish	LC50	Coho salmon,silver salmon (Oncorhynchus kisutch)	8.11 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
Xylene (CAS 1330-20-7)			
Aquatic			
Fish	LC50	Bluegill (Lepomis macrochirus)	7.711 - 9.591 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)

Butoxydiglycol	0.56
Cumene	3.66
Diethanolamine	-1.43
Ethylenediamine	-2.04
Methoxyethanol	-0.77
Morpholine	-0.86
Naphthalene	3.3
Propane	2.36
Toluene	2.73
Triethanolamine	-1
Xylene	3.12 - 3.2

Mobility in soil No data available.

Other adverse effects No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

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, (each not exceeding 1 L capacity), Limited Quantity

Transport hazard class(es)

Class	2.1
Subsidiary risk	-
Label(s)	2.1
Packing group	Not available.
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.
Special provisions	N82
Packaging exceptions	306
Packaging non bulk	None
Packaging bulk	None

IATA

UN number	UN1950
UN proper shipping name	Aerosols, flammable, Limited Quantity
Transport hazard class(es)	
Class	2.1
Subsidiary risk	-
Packing group	Not available.
Environmental hazards	Yes
ERG Code	10L
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.
Other information	
Passenger and cargo aircraft	Allowed with restrictions.
Cargo aircraft only	Allowed with restrictions.

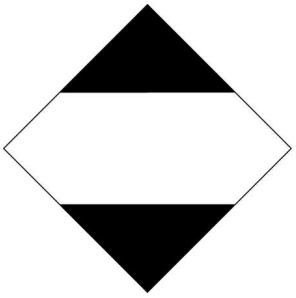
IMDG

UN number	UN1950
UN proper shipping name	AEROSOLS, MARINE POLLUTANT (Distillates (petroleum), Hydrotreated Light), Limited Quantity
Transport hazard class(es)	
Class	2
Subsidiary risk	-
Packing group	Not available.
Environmental hazards	
Marine pollutant	Yes
EmS	F-D, S-U
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.

Distillates (petroleum), Hydrotreated Light

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

DOT; IMDG



IATA

Marine pollutant

General information IMDG Regulated Marine Pollutant.

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 Nitrite (CAS 7632-00-0)	1.0 % One-Time Export Notification only.

CERCLA Hazardous Substance List (40 CFR 302.4)

Butoxydiglycol (CAS 112-34-5)	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.
Propane (CAS 74-98-6)	Listed.
Sodium Nitrite (CAS 7632-00-0)	Listed.
Toluene (CAS 108-88-3)	Listed.
Xylene (CAS 1330-20-7)	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	Flammable (gases, aerosols, liquids, or solids) Serious eye damage or eye irritation Respiratory or skin sensitization Germ cell mutagenicity Carcinogenicity Aspiration hazard

SARA 313 (TRI reporting)

Chemical name	CAS number	% by wt.
1,2,4-Trimethylbenzene	95-63-6	< 1
Butoxydiglycol	112-34-5	1 - < 3
Naphthalene	91-20-3	< 0.1

Other federal regulations

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

Butoxydiglycol (CAS 112-34-5)
Cumene (CAS 98-82-8)
Diethanolamine (CAS 111-42-2)
Methoxyethanol (CAS 109-86-4)
Naphthalene (CAS 91-20-3)
Toluene (CAS 108-88-3)
Xylene (CAS 1330-20-7)

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

Ethylenediamine (CAS 107-15-3)
Propane (CAS 74-98-6)

Safe Drinking Water Act (SDWA) Not regulated.

Drug Enforcement Administration (DEA). List 2, Essential Chemicals (21 CFR 1310.02(b) and 1310.04(f)(2) and Chemical Code Number

Toluene (CAS 108-88-3)	6594

Drug Enforcement Administration (DEA). List 1 & 2 Exempt Chemical Mixtures (21 CFR 1310.12(c))

Toluene (CAS 108-88-3)	35 %WV

DEA Exempt Chemical Mixtures Code Number

Toluene (CAS 108-88-3)	594

US state regulations

California Proposition 65

WARNING: This product can expose you to chemicals including Diethanolamine, which is known to the State of California to cause cancer, and Toluene, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

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
Toluene (CAS 108-88-3)	Listed: January 1, 1991

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)
1,3,5-Trimethylbenzene (CAS 108-67-8)
Butoxydiglycol (CAS 112-34-5)
C9-C15 Heavy Aromatic Hydrocarbons (CAS 64742-95-6)
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)
Toluene (CAS 108-88-3)

Trimethylbenzene (CAS 25551-13-7)
Xylene (CAS 1330-20-7)

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
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)	Yes
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 02-04-2020

Revision date 03-25-2020

Version # 02

HMIS® ratings
Health: 3*
Flammability: 4
Physical hazard: 0

NFPA ratings
Health: 2
Flammability: 3
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