



SAFETY DATA SHEET

Issuing Date 1-Nov-21

Revision date 1-Nov-21

Revision Number 1

1. PRODUCT AND COMPANY IDENTIFICATION

Material Name Boss XStream Diesel Fuel Conditioner

Other means of identification

Product Code(s) GHSRBS-122

Synonyms None known

Chemical Name Mixture

Recommended use Aftermarket Diesel

Restrictions on use None known

Details of the supplier of the safety data sheet

Initial supplier identifier

BOSS Lubricants

Manufacturer Address

6303 30 ST SE Calgary, AB T2C 1R4

Emergency telephone number

Initial supplier phone number (800) 844-9457

Emergency Telephone Chemtrec 1-800-424-9300

2. HAZARDS IDENTIFICATION

Classification in accordance with Schedule 1 of Canada's Hazardous Products Regulations (HPR) (SOR/2015-17) and paragraph (d) of 29 CFR 1910.1200 in the United States

Flammable liquids Category 3

Acute toxicity(oral) Category 4

Acute toxicity (Inhalation-dust and mist) Category 4

Skin Corrosion/irritation Category 2

Serious Eye Damage/Eye Irritation Category 2A

Carcinogenicity Category 2

Specific Target Organ Toxicity

Single Exposure Category 3

Repeated Exposure Category 2

Aspiration Hazard

Unknown toxicity Category 1

Acute, toxicity, oral 0.0%

Acute toxicity, inhalation, vapor 94.8%



Acute toxicity, inhalation, dust, or mist 16.8%

GHS Label Elements

Hazard Symbol(s)



Signal Word

Danger

Hazard Statement(s)

Flammable liquid and vapor. Harmful if swallowed or if inhaled. May be fatal if swallowed and enters airways. Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation. May cause drowsiness or dizziness. Suspected of causing cancer. May cause damage to organs through prolonged or repeated exposure.

Precautionary Statement(s)

Prevention

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat, hot surfaces, sparks, open flames, and other ignition sources. No smoking. Keep container tightly closed. Ground and bond container and receiving equipment. Use explosion proof (electrical/ventilating/lighting) equipment. Use non-sparking tools. Take action to prevent static discharges. Do not breathe dust/fume/gas/mist/vapor/spray. Wash thoroughly after handling. Do not eat, drink, or smoke when using this product. Use only outdoors or in a well-ventilated area. Wear protective gloves/protective clothing/eye protection/face protection.

Response

If swallowed, rinse mouth. Do not induce vomiting. Immediately call a poison center/doctor. If on skin (or hair), take off all contaminated clothing immediately and wash it before reuse. Rinse skin with water (or shower). If skin irritation occurs, get medical advice/attention. Specific treatment (see this label). If inhaled, remove person to fresh air and keep comfortable for breathing. Call a poison centre/doctor/if you feel unwell. If in eyes, rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists, get medical advice/attention. If exposed or concerned, get medical advice/attention. In case of fire, use CO₂, dry chemical, or foam for extinction. Water can be used to cool and protect exposed material.

Storage

Store in a well-ventilated place. Keep container tightly closed. Store locked up.

Disposal

Dispose of contents/container in accordance with local/regional/national/international regulations.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical name	CAS No.	Weight-%	Hazardous Material Information Review Act registry number (HMIRA registry #)	Date HMIRA filed and date exemption granted (if applicable)
Residual oils (petroleum), solvent dewaxed	64742-62-7	21 - 99	-	
Residual oils (petroleum), hydrotreated	64742-57-0	0 - 85	-	
Petroleum distillates, solvent-refined heavy paraffinic	64741-88-4	0 - 85	-	
Petroleum Distillate	NOT AVAILABLE	0.1 - 1	-	
Lubricating oils, petroleum, hydrotreated spent	64742-58-1	4.5 - 99	-	
Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based	72623-86-0	0.1 - 1	-	
Lubricating oils (petroleum), C>25 hydro treated bright stock	72623-83-7	0 - 85	-	
Alkyl phenol	NOT AVAILABLE	0.1 - 1	-	

If CAS number is "proprietary", the specific chemical identity and percentage of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

Description of first aid measures

- Inhalation** Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention, if needed.
- Eye contact** If in eyes, rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.
- Skin** Wash with plenty of soap and water while removing all contaminated clothes and shoes. Get medical attention, if needed.
- Ingestion** Do not induce vomiting. Aspiration of material due to vomiting can cause chemical pneumonitis which can be fatal. If vomiting occurs naturally, the casualty should lean forward to reduce the risk of aspiration. Rinse mouth. Immediately call a poison centre/doctor.

Most important symptoms and effects, both acute and delayed

Symptoms may be delayed

Indication of any immediate medical attention and special treatment needed

Treat symptomatically

5. FIRE FIGHTING MEASURES

General fire hazards	Use water spray to keep fire-exposed containers cool. Water may be ineffective in fighting the fire. Fight fire from a protected location. Move containers from fire area if you can do so without risk.
Suitable Extinguishing Media	Carbon dioxide, regular foam, dry chemical. Water can be used to cool and protect media: exposed material.
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 cause a flash fire or ignite explosively. Prevent buildup of vapors or gases to explosive concentrations. Vapors may travel considerable distance to a source of ignition and flash back. Water may cause splattering. Container may rupture on heating. A solid stream of water will spread the burning material. Material creates a special hazard because it floats on water. See section 10 for additional information.
Fire Fighting procedures	No data available
Special protective equipment for fire-fighters	A positive-pressure, self-contained breathing apparatus (SCBA) and full body protective equipment is required for fire emergencies

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). Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep unwind. Keep unauthorized personnel away. See section 8 of the SDS for Personal Protective Equipment.
Methods and material for containment and cleaning up	In case of leakage, eliminate all ignition sources. Dike far ahead of larger spill for later recovery and disposal. Pick up free liquid for recycle and/or disposal. Residual liquid can be absorbed on inert material. Stop the flow of material if this is without risk. Prevent entry into waterways, sewer, basements, or confined areas.

7. HANDLING AND STORAGE

Precautions for safe handling	Vapors are heavier than air and will tend to accumulate in low areas. Avoid use in confined areas without adequate ventilation. Areas of inadequate ventilation could contain concentrations high enough to cause eye irritation, headaches, respiratory discomfort, or nausea. Carefully evaluate processes using this product at elevated temperatures to ensure safe operating conditions. Electrostatic buildup may occur when pouring or transferring this product from its container. The spark produced may be sufficient to ignite vapors of flammable liquids. Always transfer product by means which avoid static buildup. Avoid pouring product directly from its container into combustible or flammable solvent. Static ignition hazard can result from handling and use. Electrically bond and ground all containers and equipment before transfer or use of material. Do not breathe thermal decomposition products. Do not handle until all safety precautions have been read and understood. Obtain special instructions before use. Keep away from heat, hot surfaces, sparks, open flames, and other ignition sources. No smoking. Take precautionary measures against static discharges. Ground and bond container and receiving equipment. Use non-sparking tools. Do not breathe dust/fume/gas/mist/vapors/spray. Avoid contact with skin. Avoid contact with eyes. Observe good industrial hygiene practices. Use only in well-ventilated areas. Use personal protective equipment as
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required. Wash hands thoroughly after handling. Do not eat, drink, or smoke when using this product. Launder contaminated clothing before reuse. Avoid environmental contamination.

Maximum Storage/Handling temperature

35°C

Conditions for safe storage, including any incompatibilities

Store in containers made of same material as original container. Keep at temperature not exceeding 40°C. Keep container tightly closed. Keep cool. Store in a well-ventilated place. Store away from incompatible materials. See section 10 for incompatible materials. Do not store near potential sources of ignition.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Appropriate Engineering Controls

Mechanical ventilation or local exhaust ventilation is required.

Material controls

Should be handles in enclosed vessels and equipment, in which case general (mechanical) room ventilation should be sufficient. Local exhaust ventilation should be used at points where dust, mist, vapors, or gases can escape into the room air. Use explosion-proof ventilation equipment to stay below exposure limits.

Individual protection measures, such as personal protective equipment

General Information

Use explosion-proof ventilation equipment. Provide easy access to water supply and eye wash facilities. Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Eye/Face Protection

Wear tight-fitted goggles or face shield

Skin Protection

In case of skin contact, wash hands and arms with soap and water.

Hand Protection

Butyl rubber. Use nitrile or neoprene gloves. Use good industrial hygiene practices.

Other

Wear apron or protective clothing in case of contact. Do not wear rings, watches or similar apparel that could entrap the material.

Respiratory Protection

Use respirator with a combination organic vapor and dust/mist cartridge. Use respirator with an organic vapor cartridge if exposure limit is exceeded. Use self-contained breathing apparatus for entry into confined space, for other poorly ventilated areas and for large spill clean-up sites. A respiratory protection program compliant with all applicable regulations must be followed whenever workplace conditions require the use of a respirator. Under normal use conditions, respirator is not usually required. Use appropriate respiratory protection if exposure to dust particles, mist or vapors is likely. Use self-contained breathing apparatus for entry into confined space, for other poorly ventilated areas and for large spill clean-up sites.

Hygiene Measures

Observe good industrial hygiene practices. Do not eat, drink, or smoke when using this product. Avoid contact with skin. Avoid contact with eyes. Wash contaminated clothing before reuse. When using, do not smoke. Wash hands before breaks and immediately after handling the product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state	Liquid
Form	Liquid
Color	Brown
Odor	Characteristic
Odor threshold	No information available

<u>Property</u>	<u>Values</u>	<u>Remarks</u>
pH	No data available	None known
Melting point/freezing point	No data available	None known
Boiling point/boiling range	182°C	ASTM D7213
Boiling point range	No data available	None known
Freezing point	No data available	None known
Evaporation Rate	No data available	None known
Flash point	52°C (Pensky-Martens closed cup)	ASTM D93
Flammability (solid, gas)	No data available	None known
Flammability Limit in Air		
Upper flammability or explosive Limits	No data available	None known
Lower flammability or explosive Limits	No data available	None known
Vapor Pressure	No data available	None known
Vapor Density	No data available	None known
Relative Density (@ 15°C)	0.872-0.912 15.6°C	ASTM D6822
Specific Gravity(water=1)	No data available	None known
Solubility n-Octanol/	Insoluble in water	None known
Water Partition coefficient	No data available	None known
Pour point	-45°C	None known
Autoignition temperature	No data available	None known
Decomposition temperature	No data available	None known
Viscosity	4 mm ² /s (40°C)	ASTM D445
Dynamic Viscosity	No data available	None known
<u>Other information</u>		
Explosive Properties	No information available	
Oxidizing Properties	No information available	
Softening Point	No information available	
Molecular Weight	No information available	
VOC Content (%)	No information available	
Liquid Density	No information available	
Bulk Density	No information available	

10. STABILITY AND REACTIVITY

Reactivity	No data available
Chemical Stability	Stable under normal conditions
Possibility of hazardous reactions	May undergo self- accelerating, exothermic reaction if heated above 212 F.
Conditions to avoid	Excessive heat. Contact with acids. Strong oxidizing agents. Strong caustic agents. Heat may cause the containers to explode. Heat, sparks, flames.
Hazardous decomposition products	Thermal decomposition or combustion may generate smoke, carbon monoxide, carbon, dioxide, and other products of incomplete combustion.
Incompatible materials	Strong acids. Aluminum. Strong oxidizing agents. Lead and lead alloys. Reactive metals, sodium, or calcium hypochlorite. Avoid heat or dehydrating agents. Reaction with peroxides may result in violent

decomposition of peroxide possible creating an explosion. Materials reactive with hydroxyl compounds. Nitriles.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Inhalation	Harmful if inhaled
Eye contact	Causes serious eye irritation
Skin contact	May be harmful in contact with skin. Causes skin irritation
Ingestion	Harmful if swallowed.

Information on toxicological effects

Acute toxicity

Oral Material can be aspirated into the lungs during the act of swallowing or vomiting. This could result in severe injury to the lungs and death. Ingestion can cause central nervous system effects such as headache, dizziness, drowsiness, and generalized weakness. Ingestion of nitrate may cause vasodilation resulting in reduced blood pressure and other cardiovascular effects. Symptoms include headache, dizziness, nausea, fatigue, heart palpitations, confusion, and possible loss of consciousness. ATEmix 500-2,000 mg/kg.

Dermal Absorption of 2-ethylhexyl nitrate through the skin may cause vasodilation resulting in reduced blood pressure and other cardiovascular effects. Symptoms include headache, dizziness, nausea, fatigue, heat palpitations, confusion, and possible loss of consciousness. Prolonged or widespread contact with this material could result in the absorption of potentially harmful amounts. Skin absorption of components of this material will cause systemic effects; note toxicity in other sections. Components of this material may be absorbed through the skin. ATEmix >5,000 mg/kg.

Inhalation High concentrations may cause headaches, dizziness, nausea, behavioral changes, weakness, drowsiness, and stupor. Inhalation of 2-ethylhexyl nitrate may cause vasodilation resulting in reduced blood pressure and other cardiovascular effects. Symptoms include headache, dizziness, nausea, fatigue, heat palpitations, confusion, and possible loss of consciousness. High concentrations may cause headaches, dizziness, weakness, and nausea. Repeated overexposure to petroleum naphtha can cause nervous system damage. High concentrations may cause headaches, dizziness, fatigues, nausea, vomiting, drowsiness, stupor, other central nervous system effects leading to visual impairment, respiratory failure, unconsciousness, and death. ATEmix (, 4h):2.5-50mg/l dusts, mists, and fumes.

Skin Corrosion/Irritation Prolonged or repeated skin contact as from clothing wet with material may cause dermatitis. Symptoms may include redness, edema, drying, and cracking of the skin. Alcohol may enhance the toxic effects. Prolonged or repeated contact may cause irritation.

Serious Eye Damage/Eye irritation

Remarks Causes serious eye irritation

Respiratory sensitization No data available

Skin Sensitization

Petroleum naphtha Classification: Not a skin sensitizer (Literature)

2-Ethylhexanol Classification: Not a skin sensitizer (Literature)

2-Ethylhexanol Classification: Not a skin sensitizer (Supplier Information)

Petroleum naphtha Classification: Not a skin sensitizer (Literature)

Xylene Classification: Not a skin sensitizer (Literature)

Cumene Classification: Not a skin sensitizer

Specific Target Organ Toxicity-Single Exposure

Petroleum naphtha Nose, throat, and lung irritant

2-Ethylhexanol Respiratory tract irritation

2-Ethylhexyl nitrate If material is misted or if vapors are generated from heating, exposure may cause irritation of mucous membranes and the upper respiratory tract.

++Trimethylbenzene Nose, throat, and lung irritant

1,2,4-Trimethylbenzene Nose, throat, and lung irritant

1,3,5-Trimethylbenzene May cause irritation to the mucous membranes and upper respiratory tract

++1,2,3-Trimethylbenzene Nose, throat, and lung irritant

Petroleum naphtha If material is misted or if vapors are generated from heating, exposure may cause irritation of mucous membranes and the upper respiratory tract.

Xylene May cause respiratory irritation

Cumene Respiratory tract irritation

Aspiration Hazard May be fatal if swallowed and enters airways

Other effects

Petroleum naphtha Narcotic effect

2-Ethylhexyl nitrate Alcohol may enhance the toxic effects

++Trimethylbenzene Central nervous system blood

Petroleum naphtha Narcotic effect

Propylene glycol ether Central nervous system

Naphthalene Blood

Chronic Effects

Carcinogenicity Not available

Cumene IARC 2B: Possibly carcinogenic to humans

Naphthalene A two-year National Toxicology Program (NTP) study found an increase incidence of nasal tumors in rats exposed to naphthalene by inhalation. In mice similarly exposed, increased incidences of alveolar/bronchiolar adenomas were observed.

IARC Monographs on the evaluation of Carcinogenic risks to humans

Cumene overall evaluation 2B. Possibly carcinogenic to humans

Naphthalene overall evaluation 2B. Possibly carcinogenic to humans

US. National Toxicology Program (NTP) report on carcinogens

Naphthalene Reasonable anticipated to be a human carcinogen

US.OSHA specifically regulated substances (29 CFR 1910.1001-1050)

No carcinogenic components identified

Germ Cell Mutagenicity

2-Ethylhexanol	This material has not exhibited mutagenic or genotoxic potential in laboratory tests
2-Ethylhexanol nitrate	This material has not exhibited mutagenic or genotoxic potential in laboratory tests
Propylene glycol ether	The Ames Salmonella test for mutagenicity was negative for this product
Xylene	This material has not exhibited mutagenic or genotoxic potential in laboratory tests
Cumene	This material has not exhibited mutagenic or genotoxic potential in laboratory tests
Petroleum naphtha	In vitro and in vivo genetic toxicity studies were negative
Naphthalene	Naphthalene has caused mutagenic effects in in vitro studies with metabolic activation, however, in vivo studies do not show evidence of germ cell mutagenicity

Reproductive toxicity

2-Ethylhexanol	No evidence of adverse effects was found in a developmental toxicity study of 2-ethylhexanol in rats. Doses up to 3 ml/kg applied to the skin during the most critical part of the gestation period produced evidence of toxicity to mothers, but no evidence of injury in the developing offspring. In a previous study, birth defects were observed by oral administration, an unlikely route of exposure in the workplace.
Xylene	Xylene is fetotoxic in rats and rabbits in the absence of maternal toxicity

Specific Target Organ Toxicity-Repeated Exposure

Product	Prolonged or repeated exposure may cause kidney damage
Petroleum naphtha	Prolonged or repeated exposure may cause kidney damage
2-Ethylhexanol	Repeated overexposure may result in liver and kidney damage. A 14-day dermal toxicity study of 2-ethylhexanol in rats showed blood effects, decreased spleen weight, and decreased triglycerides.
Unknown	Target Organ(s): Blood, liver, spleen, kidney
2-Ethylhexanol nitrate	Prolonged exposure to 2-ethylhexanol nitrate may cause vasodilation resulting in reduced blood pressure and other cardiovascular effects. Symptoms include headache, dizziness, nausea, fatigue, heart palpitations, confusion, and possible loss of consciousness.
Petroleum naphtha	Repeated exposure to petroleum naphtha can cause nervous system damage.
Xylene	Xylene has been found to cause cardiac, liver and kidney effects, anemia, and eye damage in laboratory animals. Prolonged and repeated inhalation of hydrocarbon solvents such as xylene can cause chronic neurological disturbances. Chronic exposure to xylene has been shown to cause hearing loss in experimental animals
Unknown Target Organs	Central nervous system, hearing
Naphthalene	Repeated overexposure to naphthalene may cause cataracts. Repeated overexposure to naphthalene may cause destruction of red blood cells with anemia, fever, jaundice and kidney and liver damage.

12. ECOLOGICAL INFORMATION**Ecotoxicity Fish**

Petroleum naphtha:	LC 50 (Rainbow Trout, 4 d): 9.2 mg/l
2-Ethylhexanol:	LC 50 (Fathead Minnow, 4 d): 28.2 mg/l. LC 50 (Golden Orfe, 4 d): 17.1 mg/l. NOEC (Golden Orfe, 4 d): 14 mg/l

2-Ethylhexyl nitrate:	LC 50 (Zebra Fish, 4 d): 2 mg/l
NOEC (Zebra Fish, 4 d)	1.52 mg/l
1,2,4-trimethylbenzene	LC 50 (Fathead Minnow, 4 Days): 7.72 mg/l
Petroleum naphtha	LC 50 (Rainbow Trout, 4 Days): 2 mg/l
Propylene glycol ether	LC 50 (Fathead Minnow, 4 d): > 20,000 mg/l LC 50 (Golden Orfe, 4 d): > 4,000 mg/l
Xylene	LC 50 (Fathead Minnow, 4 Days): 13.4 mg/l LC 50 (Rainbow Trout, 4 Days): 2.6 mg/l LC 50 (Rainbow Trout, 56 d): > 1.3 mg/l NOEC (Rainbow Trout, 56 d): > 1.3 mg/l
Cumene	LC 50 (Rainbow Trout, 4 d): 4.8 mg/l
<u>Aquatic Invertebrates</u>	
Petroleum naphtha	EC 50 (Water flea (Daphnia magna), 2 d): 3.2 mg/l
2-Ethylhexanol	EC 50 (Water flea (Daphnia magna), 2 d): 39 mg/l
2-Ethylhexyl nitrate	EC 50 (Water flea (Daphnia magna), 2 d): > 12.6 mg/l
1,2,4-trimethylbenzene	EC 50 (Water flea (Daphnia magna), 2 d): 3.6 mg/l
1,3,5-Trimethylbenzene	EC 50 (Water flea (Daphnia magna), 2 d): 6 mg/l
Petroleum naphtha	EC 50 (Water flea (Daphnia magna), 2 d): 3 mg/l
Propylene glycol ether	EC 50 (Water flea (Daphnia magna), 4 d): > 10,000 mg/l
Xylene	EC 50 (Water flea (Ceriodaphnia dubia), 7 d): > 1.17 mg/l EC 50 (Water flea (Daphnia magna), 2 d): 3.82 mg/l EC 50 (Water flea (Daphnia magna), 7 d): > 0.96 mg/l NOEC (Water flea (Ceriodaphnia dubia), 7 d): 1.17 mg/l NOEC (Water flea (Daphnia magna), 7 d): 0.96 mg/l EC 50 (Water flea (Daphnia magna), 21 d): > 1.57 mg/l NOEC (Water flea (Daphnia magna), 21 d): 1.57 mg/l
Cumene	EC 50 (Water flea (Daphnia magna), 2 d): 4 mg/l EC 50 (Shrimp (Mysidopsis Bahia), 4 d): 1.3 mg/l EC 50 (Water flea (Daphnia magna), 21 d): > 0.35 mg/l NOEC (Water flea (Daphnia magna), 21 d): 0.35 mg/l
Toxicity to Aquatic Plants	
Petroleum naphtha	EC 50 (Green algae (Selenastrum capricornutum), 3 d): 2.9 mg/l
2-Ethylhexanol	EC 50 (Green algae (Scenedesmus quadricauda), 3 d): 16.6 mg/l
2-Ethylhexyl nitrate	EC 50 (Alga, 3 d): 3.22 mg/l
1,3,5-Trimethylbenzene	EC 50 (Green algae (Scenedesmus quadricauda), 2 Days): 25 mg/l
Petroleum naphtha	EC 50 (Green algae (Selenastrum capricornutum), 4 d): 1.1 mg/l
Propylene glycol ether	EC 50 (Alga, 4 d): > 1,000 mg/l
Xylene	LC 50 (Alga, 3 Days): 4.36 mg/l
Cumene	EC 50 (Green algae (Selenastrum capricornutum), 3 d): 2.6 mg/l
Toxicity to soil dwelling organisms	No data available

Sediment Toxicity	No data available
Toxicity to Terrestrial Plants	No data available
Toxicity to Above-Ground Organisms	No data available
Toxicity to microorganisms	
Petroleum naphtha	EC 50 (Sludge, 0.1 d): > 99 mg/l
2-Ethylhexanol	EC 50 (Pseudomonas putida, 0.1 d): 540 mg/l EC 50 (Sludge, 0.5 d): > 100 mg/l
2-Ethylhexyl nitrate	EC 50 (Sludge, 0.3 d): > 1,000 mg/l
Xylene	LD 50 (Bacteria, 0.1 Days): > 100 mg/l
Cumene	EC 50 (Pseudomonas putida, 1 d): > 211 mg/l
Persistence and Degradability Biodegradation	
Petroleum naphtha	OECD TG 301 F, 78 %, 28 d, readily biodegradable
2-Ethylhexanol	OECD TG 302 B, 95 %, 5 d, readily biodegradable OECD TG 301 C, 100 %, 14 d, readily biodegradable
2-Ethylhexyl nitrate	Miscellaneous, 0 %, 28 d, not readily degradable.
Petroleum naphtha	OECD TG 301 F, 58 %, 28 d, not readily degradable.
Propylene glycol ether	Miscellaneous, 82 %, 28 d, readily biodegradable
Xylene	OECD TG 301 C, 100 %, 28 d, readily biodegradable
Cumene	Miscellaneous, 86 %, 28 d, readily biodegradable
Bioaccumulative Potential Bioconcentration Factor (BCF)	
2-Ethylhexanol	Bioconcentration Factor (BCF): 25.35 (calculated)
Xylene	Bioconcentration Factor (BCF): 23.99 (Measured)
Partition Coefficient n-octanol / water (log Kow)	
Petroleum naphtha	Log Kow: 4.5 (Measured)
2-Ethylhexanol	Log Kow: 2.9 (Measured)
2-Ethylhexyl nitrate	Log Kow: 5.24 (Measured)
1,2,4-trimethylbenzene	Log Kow: 3.63 (calculated)
Propylene glycol ether	Log Kow: -0.49 (calculated)
Xylene	Log Kow: 3.15 (Measured)
Cumene	Log Kow: 3.55 (Measured)
<u>Mobility</u>	
2-Ethylhexanol	soil - 1.42
2-Ethylhexyl nitrate	soil - 3.75
Other Adverse Effects	No data available.

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal Methods	Treatment, storage, transportation, and disposal must be accordance with applicable federal, state, provincial, and local regulations. Dispose of packaging or containers in accordance with local, regional, national, and international regulations. Empty containers retain material residue. Do not cut, weld, braze, solder, drill, grind, or expose containers to heat, flame, spark, or other sources of ignition.
Contaminated packaging	Container packaging may exhibit hazards

14. TRANSPORT INFORMATION

<u>Transport Canada</u>	Not regulated
<u>TDG</u>	Not regulated
<u>DOT</u>	Not regulated

15. REGULATORY INFORMATION

Safety, health, and environmental regulations/legislation specific for the substance or mixture

International Regulations

The Montreal Protocol on Substances that Deplete the Ozone Layer	Not applicable
The Stockholm Convention on Persistent Organic Pollutants	Not applicable
The Rotterdam Convention	Not applicable

Internal Inventories

TSCA	Complies
DSL/NDSL	Complies
EINECS/ELINCS	Contact supplier for inventory compliance status
ENCS	Contact supplier for inventory compliance status
IECSC	Contact supplier for inventory compliance status
KECL	Contact supplier for inventory compliance status
PICCS	Contact supplier for inventory compliance status
AICS	Contact supplier for inventory compliance status

Legend:

TSCA-Unites States Toxic Substances Control Act Section 8(b) inventory
DSL/NDSL-Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS-European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
ENCS-Japan Existing and New Chemical Substances
IECSC-China Inventory of Existing Chemical Substances
KECL-Korean Existing and Evaluated Chemical Substances
PICCS-Philippines Inventory of Chemicals and Chemical Substances
AICS-Australian Inventory of Chemical Substances

16. OTHER INFORMATION

NFPA	Health hazards	0	Flammability	1	Instability	0	Physical and chemical properties	-
HMIS	Health hazards	0	Flammability	1	Physical hazards	0	Personal protection	X

Key or legend to abbreviations and acronyms used in the safety data sheet**Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	*	Skin designation

Key literature references and sources for data used to compile the SDS

Agency for Toxic Substances and Disease Registry (ATSDR)
 U.S. Environmental Protection Agency ChemView Database
 European Food Safety Authority (EFSA)
 EPA (Environmental Protection Agency)
 Acute Exposure Guideline Level(s) (AEGl(s))
 U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act U.S. Environmental Protection Agency High Production Volume Chemicals
 Food Research Journal
 Hazardous Substance Database
 International Uniform Chemical Information Database (IUCLID)
 Japan GHS Classification
 Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)
 NIOSH (National Institute for Occupational Safety and Health)
 National Library of Medicine's ChemID Plus (NLM CIP)
 National Library of Medicine's PubMed database (NLM PUBMED)
 National Toxicology Program (NTP)
 New Zealand's Chemical Classification and Information Database (CCID)
 Organization for Economic Co-operation and Development Environment, Health, and Safety Publications
 Organization for Economic Co-operation and Development High Production Volume Chemicals Program
 Organization for Economic Co-operation and Development Screening Information Data Set
 RTECS (Registry of Toxic Effects of Chemical Substances)
 World Health Organization

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Revision Note	No information available.

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.

End of Safety Data Sheet

Data for Regulatory Rules

Region	Template name	Revision Note
Canada	HGHS	2.0

GHS Product Information

Physical state	Liquid
Flash point °C -	52°C (Pensky-Martens closed cup)
Boiling point / boiling range °C	182°C

Component Information

Canada

GHS Classification

Hazardous	Flammable liquid and vapor. Harmful if swallowed or if inhaled. May be fatal if swallowed and enters airways. Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation. May cause drowsiness or dizziness. Suspected of causing cancer. May cause damage to organs through prolonged or repeated exposure.
Signal word	Danger
Precautionary Statements	Dispose of contents/container in accordance with local, regional, national, and international regulations as applicable