

Safety Data Sheet



Section 1: Identification of the Substance/Mixture and of the Company/Undertaking

1.1 Product identifier

- Product Name** • **Bore Scrubber Bore Cleaner Gel Aerosol**
- Synonyms** • Bore Scrubber Gel Aerosol
- Product Code** • 33633; BSG5

1.2 Relevant identified uses of the substance or mixture and uses advised against

- Relevant identified use(s)** • For the cleaning of firearm metal parts

1.3 Details of the supplier of the safety data sheet

- Manufacturer** • Birchwood Casey, LLC

Section 2: Hazards Identification

EU/EEC

According to: Regulation (EC) No 1272/2008 (CLP)/REACH 1907/2006 [amended by 453/2010]
According to: EU Directive 67/548/EEC (DSD) or 1999/45/EC (DPD)

2.1 Classification of the substance or mixture

- CLP**
- Flammable Aerosols 2 - H223
 - Skin Irritation 2 - H315
 - Serious Eye Damage 1 - H318
 - Specific Target Organ Toxicity Single Exposure 3: Narcotic Effects - H336
 - Specific Target Organ Toxicity Repeated Exposure 1 - H372
- DSD/DPD**
- Highly Flammable (F)
 - Toxic (T)
 - Irritant (Xi)
 - R11, R36/38, R48/20, R67

2.2 Label Elements

CLP

DANGER



- Hazard statements**
- H223 - Flammable aerosol
 - H315 - Causes skin irritation
 - H318 - Causes serious eye damage
 - H336 - May cause drowsiness or dizziness
 - H372 - Causes damage to organs - Nervous System, Liver, Kidney through prolonged or repeated exposure via Inhalation

Precautionary statements

- Prevention**
- P210 - Keep away from heat, sparks, open flames and/or hot surfaces. - No smoking.
 - P211 - Do not spray on an open flame or other ignition source.
 - P251 - Pressurized container: Do not pierce or burn, even after use.
 - P260 - Do not breathe the mist/vapours/spray.
 - P264 - Wash thoroughly after handling.
 - P271 - Use only outdoors or in a well-ventilated area.
 - P280 - Wear protective gloves and eye/face protection , .
- Response**
- P304+P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
 - P312 - Call a POISON CENTER or doctor/physician if you feel unwell.
 - P302+P352 - IF ON SKIN: Wash with plenty of soap and water.
 - P321 - Specific treatment, see supplemental first aid information.
 - P362 - Take off contaminated clothing and wash before reuse.
 - P332+P313 - If skin irritation occurs: Get medical advice/attention.
 - P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 - P310 - Immediately call a POISON CENTER or doctor/physician.
 - P314 - Get medical advice/attention if you feel unwell.
- Storage/Disposal**
- P403+P233 - Store in a well-ventilated place. Keep container tightly closed.
 - P405 - Store locked up.
 - P410+P412 - Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.
 - P501 - Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

DSD/DPD



- Risk phrases**
- R11 - Highly flammable.
 - R36/38 - Irritating to eyes and skin.
 - R48/20 - Harmful: danger of serious damage to health by prolonged exposure through inhalation.
 - R67 - Vapours may cause drowsiness and dizziness.
- Safety phrases**
- S9 - Keep container in a well ventilated place
 - S16 - Keep away from sources of ignition - No Smoking.
 - S26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
 - S45 - In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

2.3 Other Hazards

- CLP**
- According to Regulation (EC) No. 1272/2008 (CLP) this material is considered hazardous.

- DSD/DPD**
- According to European Directive 1999/45/EC this material is considered dangerous.

United States (US)

According to: OSHA 29 CFR 1910.1200 HCS

2.1 Classification of the substance or mixture

OSHA HCS 2012

- Flammable Aerosols 2
- Skin Irritation 2
- Serious Eye Damage 1
- Specific Target Organ Toxicity Single Exposure 3: Narcotic Effects
- Reproductive Toxicity 2
- Specific Target Organ Toxicity Repeated Exposure 1

2.2 Label elements

OSHA HCS 2012

DANGER



- Hazard statements**
- Flammable aerosol
 - Causes skin irritation
 - Causes serious eye damage
 - May cause drowsiness or dizziness
 - Suspected of damaging fertility or the unborn child.
 - Causes damage to organs - Nervous System, Liver, Kidney through prolonged or repeated exposure via Inhalation

Precautionary statements

- 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 and/or 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.
 - Do not breathe mist/vapours/spray.
 - Wash thoroughly after handling.
 - Use only outdoors or in a well-ventilated area.
 - Wear protective gloves and eye/face protection , .
- Response**
- IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
 - Call a POISON CENTER or doctor/physician if you feel unwell.
 - IF ON SKIN: Wash with plenty of soap and water.
 - Specific treatment, see supplemental first aid information.
 - Take off contaminated clothing and wash before reuse.
 - If skin irritation occurs: Get medical advice/attention.
 - 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 or doctor/physician.
 - IF exposed or concerned: Get medical advice/attention.
 - Get medical advice/attention if you feel unwell.
- Storage/Disposal**
- Store in a well-ventilated place. Keep container tightly closed.
 - Store locked up.
 - Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.
 - Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

2.3 Other hazards

OSHA HCS 2012

- Under United States Regulations (29 CFR 1910.1200 - Hazard Communication Standard), this product is considered hazardous.

Canada

According to: WHMIS

2.1 Classification of the substance or mixture

WHMIS

- Flammable Aerosols - B5

Other Toxic Effects - D2B
Corrosive - E

2.2 Label elements

WHMIS



- Flammable Aerosols - B5
Other Toxic Effects - D2B
Corrosive - E

2.3 Other hazards

WHMIS

- In Canada, the product mentioned above is considered hazardous under the Workplace Hazardous Materials Information System (WHMIS).

Section 3 - Composition/Information on Ingredients

3.1 Substances

- Material does not meet the criteria of a substance in accordance with Regulation (EC) No 1272/2008.

3.2 Mixtures

Composition					
Chemical Name	Identifiers	%	LD50/LC50	Classifications According to Regulation/Directive	Comments
Distillates (petroleum), hydrotreated light	CAS:64742-47-8 EC Number:265-149-8 EU Index:649-422-00-2	< 51%	NDA	EU DSD/DPD: EU CLP, Annex VI, Table 3.2: Xn, R65 EU CLP: EU CLP, Annex VI, Table 3.1: Asp. Tox. 1, H304 OSHA HCS 2012: Data lacking	NDA
Kerosene	CAS:8008-20-6 EC Number:232-366-4 EU Index:649-404-00-4	< 20%	Ingestion/Oral-Rat LD50 • 15 g/kg	EU DSD/DPD: EU CLP, Annex VI, Table 3.2: Xn, R65 EU CLP: EU CLP, Annex VI, Table 3.1: Asp. Tox. 1, H304 OSHA HCS 2012: Flam. Liq. 3; Skin Irrit. 2; Eye Irrit. 2A; Asp. Tox. 1	NDA
Propane	CAS:74-98-6 EC Number:200-827-9 EU Index:601-003-00-5	< 8%	NDA	EU DSD/DPD: EU CLP, Annex VI, Table 3.2: F+, R12 EU CLP: Annex VI, Table 3.1: Flam. Gas 1, H220; Press. Gas - Comp., H280 OSHA HCS 2012: Flam. Gas 1; Press. Gas - Comp.; Simp. Asphyx.	NDA
Butane	CAS:106-97-8 EC Number:203-448-7 EU Index:601-004-00-0	< 7%	Inhalation-Rat LC50 • 658 g/m ³ 4 Hour(s)	EU DSD/DPD: EU CLP, Annex VI, Table 3.2: F+, R12 EU CLP: Annex VI, Table 3.1: Flam. Gas 1, H220; Press. Gas - Comp., H280 OSHA HCS 2012: Flam. Gas 1; Press. Gas - Comp.; Simp. Asphyx.	NDA

1,2-Propanediol	CAS: 57-55-6 EC Number: 200-338-0	< 6%	Ingestion/Oral-Rat LD50 • 20 g/kg Skin-Rabbit LD50 • 20800 mg/kg	EU DSD/DPD: Self Classified: Xi R38 EU CLP: Self Classified: Skin Irrit. 2, H315 OSHA HCS 2012: Skin Irrit. 2; Eye Irrit. 2B	NDA
Dipropylene glycol monomethyl ether	CAS: 34590-94-8 EC Number: 252-104-2	< 5%	Ingestion/Oral-Rat LD50 • 5400 µL/kg Skin-Rabbit LD50 • 10 mL/kg	EU DSD/DPD: Not Classified EU CLP: Not Classified OSHA HCS 2012: Flam. Liq. 4; Eye Irrit. 2B	NDA
2-Aminoethanol	CAS: 141-43-5 EC Number: 205-483-3 EU Index: 603-030-00-8	< 4%	Ingestion/Oral-Rat LD50 • 1720 mg/kg Skin-Rabbit LD50 • 1 mL/kg	EU DSD/DPD: EU CLP, Annex VI, Table 3.2: Xn, R20/21/22; C, R34 EU CLP: Annex VI, Table 3.1: Acute Tox. 4, H312; Acute Tox. 4, H332; Acute Tox. 4, H302; Skin Corr. 1B, H314 OSHA HCS 2012: Flam. Liq. 4; Acute Tox. 4 (orl, skn); Skin Irrit. 2; Eye Dam. 1; Repr. 2	NDA
Oleic acid	CAS: 112-80-1 EC Number: 204-007-1	< 2%	Ingestion/Oral-Rat LD50 • 25000 mg/kg	EU DSD/DPD: Not Classified EU CLP: Not Classified OSHA HCS 2012: Eye Irrit. 2B	NDA
Hydrotreated light naphthenic petroleum distillate (highly refined)	CAS: 64742-53-6 EC Number: 265-156-6 EU Index: 649-466-00-2	< 2%	NDA	EU DSD/DPD: EU CLP, Annex VI, Table 3.2: Carc.Cat.2, R45 EU CLP: EU CLP, Annex VI, Table 3.1: Carc. 1B, H350 OSHA HCS 2012: Skin Irrit. 2	NDA

Section 4 - First Aid Measures

4.1 Description of first aid measures

Inhalation

- Move victim to fresh air. Administer oxygen if breathing is difficult. Give artificial respiration if victim is not breathing. If signs/symptoms continue, get medical attention.

Skin

- Remove and isolate contaminated clothing. Wash skin with soap and water. If irritation develops and persists, get medical attention.

Eye

- In case of contact with substance, immediately flush eyes with running water for at least 20 minutes. If eye irritation persists: Get medical advice/attention.

Ingestion

- If victim is conscious, give 1 – 2 glasses of water. Do NOT induce vomiting. Obtain medical attention immediately if ingested.

4.2 Most important symptoms and effects, both acute and delayed

- Refer to Section 11 - Toxicological Information.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to Physician

- All treatments should be based on observed signs and symptoms of distress in the patient. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred.

Section 5 - Firefighting Measures

5.1 Extinguishing media

Suitable Extinguishing Media

- LARGE FIRES: Water spray, fog or alcohol-resistant foam.
SMALL FIRES: Dry chemical, CO₂, water spray or alcohol-resistant foam.

Unsuitable Extinguishing

- No data available

Media**5.2 Special hazards arising from the substance or mixture****Unusual Fire and Explosion Hazards**

- Containers may explode when heated. Vapor explosion hazard indoors, outdoors or in sewers. HIGHLY FLAMMABLE: Will be easily ignited by heat, sparks or flames. Many liquids are lighter than water. Most vapors are heavier than air. They will spread along ground and collect in low or confined areas (sewers, basements, tanks). Runoff to sewer may create fire or explosion hazard. Vapors may form explosive mixtures with air. Vapors may travel to source of ignition and flash back.

Hazardous Combustion Products

- No data available

5.3 Advice for firefighters

- Structural firefighters' protective clothing will only provide limited protection. Wear positive pressure self-contained breathing apparatus (SCBA). Move containers from fire area if you can do it without risk. LARGE FIRES: Cool containers with flooding quantities of water until well after fire is out.

Section 6 - Accidental Release Measures**6.1 Personal precautions, protective equipment and emergency procedures****Personal Precautions**

- Ventilate enclosed areas. CAUTION: Victim may be a source of contamination. Do not walk through spilled material. Wear appropriate personal protective equipment, avoid direct contact. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.

Emergency Procedures

- As an immediate precautionary measure, isolate spill or leak area for at least 50 meters (150 feet) in all directions. If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions. LARGE SPILL: Consider initial downwind evacuation for at least 300 meters (1000 feet) ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Keep unauthorized personnel away. Stay upwind. Keep out of low areas. Ventilate closed spaces before entering.

6.2 Environmental precautions

- Prevent entry into waterways, sewers, basements or confined areas.

6.3 Methods and material for containment and cleaning up**Containment/Clean-up Measures**

- Stop leak if you can do it without risk. Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers. Use clean non-sparking tools to collect absorbed material. A vapor suppressing foam may be used to reduce vapors. All equipment used when handling the product must be grounded. LARGE SPILLS: Dike far ahead of liquid spill for later disposal. LARGE SPILLS: Water spray may reduce vapor; but may not prevent ignition in closed spaces.

6.4 Reference to other sections

- Refer to Section 8 - Exposure Controls/Personal Protection and Section 13 - Disposal Considerations.

Section 7 - Handling and Storage**7.1 Precautions for safe handling****Handling**

- Use only with adequate ventilation. Avoid contact with heat and ignition sources. Take precautionary measures against static charges. All equipment used when handling the product must be grounded. Wear appropriate personal protective equipment, avoid

direct contact. Do not breathe mist, vapours, spray. Avoid contact with skin, eyes, and clothing. Empty containers may still have product residue and flammable vapors. Do not puncture or incinerate container. Wash thoroughly with soap and water after handling and before eating, drinking, or using tobacco.

7.2 Conditions for safe storage, including any incompatibilities

Storage

- Store in a cool/low-temperature, well-ventilated place away from heat and ignition sources. Do not store where temperature may exceed 120°F.

7.3 Specific end use(s)

- Refer to Section 1.2 - Relevant identified uses.

Section 8 - Exposure Controls/Personal Protection

8.1 Control parameters

Exposure Limits/Guidelines						
	Result	ACGIH	Canada Ontario	Canada Quebec	China	Europe
2-Aminoethanol (141-43-5)	STELs	6 ppm STEL	6 ppm STEL	6 ppm STEV; 15 mg/m3 STEV	15 mg/m3 STEL	3 ppm STEL; 7.6 mg/m3 STEL
	TWAs	3 ppm TWA	3 ppm TWA	3 ppm TWAEV; 7.5 mg/m3 TWAEV	8 mg/m3 TWA	1 ppm TWA; 2.5 mg/m3 TWA
Dipropylene glycol monomethyl ether (34590-94-8)	STELs	150 ppm STEL	150 ppm STEL	150 ppm STEV; 909 mg/m3 STEV	900 mg/m3 STEL	Not established
	TWAs	100 ppm TWA	100 ppm TWA	100 ppm TWAEV; 606 mg/m3 TWAEV	600 mg/m3 TWA	Not established
1,2-Propanediol (57-55-6)	TWAs	Not established	10 mg/m3 TWA (for assessing the visibility in a work environment where 1,2-Propylene glycol aerosol is present, aerosol only); 50 ppm TWA (aerosol and vapor); 155 mg/m3 TWA (aerosol and vapor)	Not established	Not established	Not established
Butane (106-97-8)	TWAs	Not established	800 ppm TWA (listed under Aliphatic hydrocarbon gases)	800 ppm TWAEV; 1900 mg/m3 TWAEV	Not established	Not established
	STELs	1000 ppm STEL	Not established	Not established	Not established	Not established
Propane (74-98-6)	TWAs	1000 ppm TWA (listed under Aliphatic hydrocarbon gases: Alkane C1-4)	1000 ppm TWA	1000 ppm TWAEV; 1800 mg/m3 TWAEV	Not established	Not established
Kerosene (8008-20-6)	TWAs	200 mg/m3 TWA (application restricted to conditions in which there are negligible aerosol exposures, total hydrocarbon vapor)	200 mg/m3 TWA (restricted to conditions where there is negligible aerosol exposure, as total hydrocarbon vapour)	Not established	Not established	Not established
Exposure Limits/Guidelines (Con't.)						
	Result	Germany DFG	Germany TRGS	NIOSH	OSHA	
			2 ppm TWA AGW (The			

2-Aminoethanol (141-43-5)	TWAs	Not established	risk of damage to the embryo or fetus can be excluded when AGW and BGW values are observed, exposure factor 2); 5.1 mg/m3 TWA AGW (The risk of damage to the embryo or fetus can be excluded when AGW and BGW values are observed, exposure factor 2)	3 ppm TWA; 8 mg/m3 TWA	3 ppm TWA; 6 mg/m3 TWA
	STELs	Not established	Not established	6 ppm STEL; 15 mg/m3 STEL	Not established
	Ceilings	4 ppm Peak; 10.2 mg/m3 Peak	Not established	Not established	Not established
	MAKs	2 ppm TWA MAK; 5.1 mg/m3 TWA MAK	Not established	Not established	Not established
Dipropylene glycol monomethyl ether (34590-94-8)	TWAs	Not established	50 ppm TWA AGW (isomer mixture, exposure factor 1); 310 mg/m3 TWA AGW (isomer mixture, exposure factor 1)	100 ppm TWA; 600 mg/m3 TWA	100 ppm TWA; 600 mg/m3 TWA
	STELs	Not established	Not established	150 ppm STEL; 900 mg/m3 STEL	Not established
	Ceilings	50 ppm Peak (mixture of isomers); 310 mg/m3 Peak (mixture of isomers)	Not established	Not established	Not established
	MAKs	50 ppm TWA MAK; 310 mg/m3 TWA MAK (mixture of isomers)	Not established	Not established	Not established
Butane (106-97-8)	TWAs	Not established	1000 ppm TWA AGW (exposure factor 4); 2400 mg/m3 TWA AGW (exposure factor 4)	800 ppm TWA; 1900 mg/m3 TWA	Not established
	Ceilings	4000 ppm Peak (listed under Butane); 9600 mg/m3 Peak (listed under Butane)	Not established	Not established	Not established
	MAKs	1000 ppm TWA MAK; 2400 mg/m3 TWA MAK	Not established	Not established	Not established
Propane (74-98-6)	TWAs	Not established	1000 ppm TWA AGW (exposure factor 4); 1800 mg/m3 TWA AGW (exposure factor 4)	1000 ppm TWA; 1800 mg/m3 TWA	1000 ppm TWA; 1800 mg/m3 TWA
	Ceilings	4000 ppm Peak; 7200 mg/m3 Peak	Not established	Not established	Not established
	MAKs	1000 ppm TWA MAK; 1800 mg/m3 TWA MAK	Not established	Not established	Not established

Kerosene (8008-20-6)	TWAs	Not established	Not established	100 mg/m3 TWA	Not established
Distillates (petroleum), hydrotreated light (64742-47-8)	Ceilings	40 ppm Peak; 280 mg/m3 Peak	Not established	Not established	Not established
	MAKs	20 ppm TWA MAK; 140 mg/m3 TWA MAK	Not established	Not established	Not established

Exposure Control Notations

China

- Dipropylene glycol monomethyl ether (34590-94-8): **Skin:** (Skin notation)

Canada Ontario

- Dipropylene glycol monomethyl ether (34590-94-8): **Skin:** (Absorption through skin, eyes, or mucous membranes)
- Kerosene (8008-20-6): **Skin:** (Absorption through skin, eyes, or mucous membranes (listed under Kerosene/Jet fuels))

Canada Quebec

- Dipropylene glycol monomethyl ether (34590-94-8): **Skin:** (Skin designation)

ACGIH

- Dipropylene glycol monomethyl ether (34590-94-8): **Skin:** (Skin - potential significant contribution to overall exposure by the cutaneous route)
- Kerosene (8008-20-6): **Carcinogens:** (A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans) | **Skin:** (Skin - potential significant contribution to overall exposure by the cutaneous route)

Germany TRGS

- 2-Aminoethanol (141-43-5): **Sensitizers:** (Skin sensitizer (May cause sensitization by skin contact; May cause an allergic skin reaction, listed under Substances or substance groups with sufficient scientific evidence showing sensitizing effects)) | **Skin:** (skin notation)

Germany DFG

- Propane (74-98-6): **Pregnancy:** (classification not yet possible)
- Butane (106-97-8): **Pregnancy:** (classification not yet possible)
- Distillates (petroleum), hydrotreated light (64742-47-8): **Carcinogens:** (Category 3B (could be carcinogenic for man, isomers in technical mixtures)) | **Pregnancy:** (no risk to embryo/fetus if exposure limits adhered to)
- Dipropylene glycol monomethyl ether (34590-94-8): **Pregnancy:** (classification not yet possible (mixture of isomers))
- Oleic acid (112-80-1): **Carcinogens:** (Category 3A (could be carcinogenic for man))
- 2-Aminoethanol (141-43-5): **Pregnancy:** (no risk to embryo/fetus if exposure limits adhered to) | **Sensitizers:** (skin sensitizer)

Exposure Limits Supplemental

ACGIH

- Propane (74-98-6): **TLV Basis - Critical Effects:** (cardiac sensitization (listed under Aliphatic hydrocarbon gases: Alkanes C1-4); CNS impairment (listed under Aliphatic hydrocarbon gases: Alkanes C1-4))
- Butane (106-97-8): **TLV Basis - Critical Effects:** (CNS impairment)
- Dipropylene glycol monomethyl ether (34590-94-8): **TLV Basis - Critical Effects:** (CNS impairment; eye and upper respiratory tract irritation)
- Kerosene (8008-20-6): **TLV Basis - Critical Effects:** (CNS impairment; skin and upper respiratory tract irritation)
- 2-Aminoethanol (141-43-5): **TLV Basis - Critical Effects:** (eye and skin irritation)

8.2 Exposure controls

Engineering Measures/Controls

- Good general ventilation 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. Use explosion-proof electrical/ventilating/lighting/equipment.

Personal Protective Equipment

Respiratory

- Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or symptoms are experienced.

Eye/Face

- Wear safety goggles.

Skin/Body

- Wear appropriate gloves.

Environmental Exposure Controls

- Controls should be engineered to prevent release to the environment, including procedures to prevent spills, atmospheric release and release to waterways. Follow best practice for site management and disposal of waste.

Key to abbreviations

ACGIH = American Conference of Governmental Industrial Hygiene

MAK = Maximale Arbeitsplatz Konzentration is the maximum permissible concentration

NIOSH = National Institute of Occupational Safety and Health

OSHA = Occupational Safety and Health Administration

STEL = Short Term Exposure Limits are based on 15-minute exposures

STEV = Short Term Exposure Value

TLV = Threshold Limit Value determined by the American Conference of Governmental Industrial Hygienists (ACGIH)

TWAEV = Time-Weighted Average Exposure Value

TWA = Time-Weighted Averages are based on 8h/day, 40h/week exposures

Section 9 - Physical and Chemical Properties**9.1 Information on Physical and Chemical Properties**

Material Description			
Physical Form	Liquid	Appearance/Description	Yellowish gel with a kerosene odor.
Color	Yellowish	Odor	Kerosene-like
Odor Threshold	Data lacking		
General Properties			
Boiling Point	Data lacking	Melting Point	Data lacking
Decomposition Temperature	Data lacking	pH	Data lacking
Specific Gravity/Relative Density	= 0.8445	Water Solubility	Negligible
Viscosity	Data lacking	Explosive Properties	Data lacking
Oxidizing Properties:	Data lacking		
Volatility			
Vapor Pressure	Data lacking	Vapor Density	> 1 Air=1
Evaporation Rate	< 1 Ether = 1	Volatiles (Vol.)	84 %
Flammability			
Flash Point	-156 F(-104.4444 C) CC (Closed Cup) (based on propellant)	UEL	15 %
LEL	1.9 %	Autoignition	Data lacking
Flammability (solid, gas)	Data lacking		
Environmental			
Octanol/Water Partition coefficient	Data lacking		

9.2 Other Information

- No additional physical and chemical parameters noted.

Section 10: Stability and Reactivity**10.1 Reactivity**

- No dangerous reaction known under conditions of normal use.

10.2 Chemical stability

- Stable under normal temperatures and pressures.

10.3 Possibility of hazardous reactions

- Hazardous polymerization will not occur.

10.4 Conditions to avoid

- Avoid high temperatures and ignition sources.

10.5 Incompatible materials

- Strong oxidizers.

10.6 Hazardous decomposition products

- Thermal decomposition may produce carbon monoxide, carbon dioxide, sulfur oxides, aldehydes.

Section 11 - Toxicological Information

11.1 Information on toxicological effects

Components		
Butane (< 7%)	106-97-8	Acute Toxicity: Inhalation-Rat LC50 • 658 g/m ³ 4 Hour(s)
Dipropylene glycol monomethyl ether (< 5%)	34590-94-8	Acute Toxicity: Ingestion/Oral-Rat LD50 • 5.5 mL/kg; Skin-Rabbit LD50 • 10 mL/kg; Irritation: Eye-Rabbit • 500 mg 24 Hour(s) • Mild irritation; Skin-Rabbit • 500 mg-Open • Mild irritation
Kerosene (< 20%)	8008-20-6	Acute Toxicity: Ingestion/Oral-Rat LD50 • 15 g/kg; <i>Skin and Appendages:After topical exposure:</i> Corrosive ; Irritation: Skin-Rabbit • 500 mg • Severe irritation
Oleic acid (< 2%)	112-80-1	Acute Toxicity: Ingestion/Oral-Rat LD50 • 25000 mg/kg; Irritation: Eye-Rabbit • 100 mg • Mild irritation; Skin-Rabbit • 500 mg-Open • Mild irritation
1,2-Propanediol (< 6%)	57-55-6	Acute Toxicity: Ingestion/Oral-Rat LD50 • 20 g/kg; Skin-Rabbit LD50 • 20800 mg/kg; Irritation: Eye-Rabbit • 100 mg • Mild irritation; Skin-Human • 104 mg 3 Day(s)-Intermittent • Moderate irritation
2-Aminoethanol (< 4%)	141-43-5	Acute Toxicity: Ingestion/Oral-Rat LD50 • 1720 mg/kg; Skin-Rabbit LD50 • 1 mL/kg; Irritation: Eye-Rabbit • 250 µg • Severe irritation; Skin-Rabbit • 505 mg-Open • Moderate irritation; Reproductive: Ingestion/Oral-Rat TDLo • 500 mg/kg (6-15D preg); <i>Reproductive Effects:Effects on Embryo or Fetus:Fetotoxicity (except death, e.g., stunted fetus); Reproductive Effects:Effects on Embryo or Fetus:Fetal death; Reproductive Effects:Specific Developmental Abnormalities:Musculoskeletal system</i>

GHS Properties	Classification
Acute toxicity	EU/CLP • Data lacking OSHA HCS 2012 • Data lacking
Aspiration Hazard	EU/CLP • Data lacking OSHA HCS 2012 • Data lacking
Carcinogenicity	EU/CLP • Data lacking OSHA HCS 2012 • Data lacking
Germ Cell Mutagenicity	EU/CLP • Data lacking OSHA HCS 2012 • Data lacking
Skin corrosion/Irritation	EU/CLP • Skin Irritation 2 OSHA HCS 2012 • Skin Irritation 2
Skin sensitization	EU/CLP • Data lacking OSHA HCS 2012 • Data lacking
STOT-RE	EU/CLP • Specific Target Organ Toxicity Repeated Exposure 1 OSHA HCS 2012 • Specific Target Organ Toxicity Repeated Exposure 1
STOT-SE	EU/CLP • Specific Target Organ Toxicity Single Exposure 3: Narcotic Effects OSHA HCS 2012 • Specific Target Organ Toxicity Single Exposure 3: Narcotic Effects

Toxicity for Reproduction	EU/CLP • Data lacking OSHA HCS 2012 • Toxic to Reproduction 2
Respiratory sensitization	EU/CLP • Data lacking OSHA HCS 2012 • Data lacking
Serious eye damage/Irritation	EU/CLP • Serious Eye Damage 1 OSHA HCS 2012 • Serious Eye Damage 1

Potential Health Effects

Inhalation

- Acute (Immediate)**
 - May affect the central nervous system. Symptoms may include dizziness, drowsiness, lethargy, coma and death.
- Chronic (Delayed)**
 - No data available.

Skin

- Acute (Immediate)**
 - Causes skin irritation.
- Chronic (Delayed)**
 - No data available.

Eye

- Acute (Immediate)**
 - Causes serious eye damage.
- Chronic (Delayed)**
 - No data available.

Ingestion

- Acute (Immediate)**
 - May cause irritation to the gastrointestinal tract.
- Chronic (Delayed)**
 - No data available.

Other

- Chronic (Delayed)**
 - Causes damage to Liver, Nervous System, and Kidneys through prolonged or repeated exposure.

Reproductive Effects

- Repeated and prolonged exposure may cause reproductive effects.

Key to abbreviations

LC = Lethal Concentration

LD = Lethal Dose

TD = Toxic Dose

Section 12 - Ecological Information

12.1 Toxicity

- Material data lacking.

12.2 Persistence and degradability

- Material data lacking.

12.3 Bioaccumulative potential

- Material data lacking.

12.4 Mobility in Soil

- Material data lacking.

12.5 Results of PBT and vPvB assessment

- No PBT and vPvB assessment has been conducted.

12.6 Other adverse effects

- No studies have been found.

Section 13 - Disposal Considerations

13.1 Waste treatment methods

Product waste

- Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

Packaging waste

- Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

Section 14 - Transport Information

	14.1 UN number	14.2 UN proper shipping name	14.3 Transport hazard class(es)	14.4 Packing group	14.5 Environmental hazards
DOT	UN1950	Aerosols	2.1	NDA	NDA
TDG	UN1950	AEROSOLS	2.1	NDA	NDA
IMO/IMDG	UN1950	AEROSOLS	2.1	NDA	NDA
IATA/ICAO	UN1950	Aerosols, flammable	2.1	NDA	NDA

14.6 Special precautions for user

- None known.

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

- Not relevant.

Section 15 - Regulatory Information

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

SARA Hazard Classifications • Acute, Chronic, Fire, Pressure(Sudden Release of)

State Right To Know				
Component	CAS	MA	NJ	PA
1,2-Propanediol	57-55-6	No	Yes	Yes
2-Aminoethanol	141-43-5	Yes	Yes	Yes
Butane	106-97-8	Yes	Yes	Yes
Dipropylene glycol monomethyl ether	34590-94-8	Yes	Yes	Yes
Distillates (petroleum), hydrotreated light	64742-47-8	No	No	No
Hydrotreated light naphthenic petroleum distillate (highly refined)	64742-53-6	Yes	No	No
Kerosene	8008-20-6	Yes	Yes	Yes
Oleic acid	112-80-1	No	No	Yes
Propane	74-98-6	Yes	Yes	Yes

Inventory						
Component	CAS	Canada DSL	Canada NDSL	China	EU EINECS	EU ELNICS
1,2-Propanediol	57-55-6	Yes	No	Yes	Yes	No
2-Aminoethanol	141-43-5	Yes	No	Yes	Yes	No
Butane	106-97-8	Yes	No	Yes	Yes	No
Dipropylene glycol monomethyl ether	34590-94-8	Yes	No	Yes	Yes	No
Distillates (petroleum), hydrotreated light	64742-47-8	Yes	No	Yes	Yes	No
Hydrotreated light naphthenic petroleum distillate (highly refined)	64742-53-6	Yes	No	Yes	Yes	No
Kerosene	8008-20-6	Yes	No	Yes	Yes	No
Oleic acid	112-80-1	Yes	No	Yes	Yes	No
Propane	74-98-6	Yes	No	Yes	Yes	No
Inventory (Con't.)						
Component	CAS	TSCA				
1,2-Propanediol	57-55-6	Yes				
2-Aminoethanol	141-43-5	Yes				
Butane	106-97-8	Yes				
Dipropylene glycol monomethyl ether	34590-94-8	Yes				
Distillates (petroleum), hydrotreated light	64742-47-8	Yes				
Hydrotreated light naphthenic petroleum distillate (highly refined)	64742-53-6	Yes				
Kerosene	8008-20-6	Yes				
Oleic acid	112-80-1	Yes				
Propane	74-98-6	Yes				

Canada

Labor

Canada - WHMIS - Classifications of Substances

• Distillates (petroleum), hydrotreated light	64742-47-8	Not Listed
• Oleic acid	112-80-1	Uncontrolled product according to WHMIS classification criteria
• Dipropylene glycol monomethyl ether	34590-94-8	B3
• 2-Aminoethanol	141-43-5	B3, E
• 1,2-Propanediol	57-55-6	Uncontrolled product according to WHMIS classification criteria
• Propane	74-98-6	A, B1
• Butane	106-97-8	A, B1
• Hydrotreated light naphthenic petroleum distillate (highly refined)	64742-53-6	Not Listed

• Kerosene	8008-20-6	B3, D2B
Canada - WHMIS - Ingredient Disclosure List		
• Distillates (petroleum), hydrotreated light	64742-47-8	Not Listed
• Oleic acid	112-80-1	1 %
• Dipropylene glycol monomethyl ether	34590-94-8	1 %
• 2-Aminoethanol	141-43-5	1 %
• 1,2-Propanediol	57-55-6	1 %
• Propane	74-98-6	Not Listed
• Butane	106-97-8	1 %
• Hydrotreated light naphthenic petroleum distillate (highly refined)	64742-53-6	Not Listed
• Kerosene	8008-20-6	Not Listed

Environment**Canada - CEPA - Priority Substances List**

• Distillates (petroleum), hydrotreated light	64742-47-8	Not Listed
• Oleic acid	112-80-1	Not Listed
• Dipropylene glycol monomethyl ether	34590-94-8	Not Listed
• 2-Aminoethanol	141-43-5	Not Listed
• 1,2-Propanediol	57-55-6	Not Listed
• Propane	74-98-6	Not Listed
• Butane	106-97-8	Not Listed
• Hydrotreated light naphthenic petroleum distillate (highly refined)	64742-53-6	Not Listed
• Kerosene	8008-20-6	Not Listed

Europe**Other****EU - CLP (1272/2008) - Annex VI - Table 3.2 - Classification**

• Distillates (petroleum), hydrotreated light	64742-47-8	Xn; R65
• Oleic acid	112-80-1	Not Listed
• Dipropylene glycol monomethyl ether	34590-94-8	Not Listed
• 2-Aminoethanol	141-43-5	Xn; R20/21/22 C; R34
• 1,2-Propanediol	57-55-6	Not Listed
• Propane	74-98-6	F+; R12
• Butane	106-97-8	F+; R12
• Hydrotreated light naphthenic petroleum distillate (highly refined)	64742-53-6	Carc.Cat.2; R45
• Kerosene	8008-20-6	Xn; R65

EU - CLP (1272/2008) - Annex VI - Table 3.2 - Concentration Limits

• Distillates (petroleum), hydrotreated light	64742-47-8	Not Listed
• Oleic acid	112-80-1	Not Listed
• Dipropylene glycol monomethyl ether	34590-94-8	Not Listed
• 2-Aminoethanol	141-43-5	10%≤C: C; R:34 5% ≤C<10%: Xi; R:36/37/38
• 1,2-Propanediol	57-55-6	Not Listed
• Propane	74-98-6	Not Listed
• Butane	106-97-8	Not Listed
• Hydrotreated light naphthenic petroleum distillate (highly refined)	64742-53-6	Not Listed
• Kerosene	8008-20-6	Not Listed

EU - CLP (1272/2008) - Annex VI - Table 3.2 - Labelling

• Distillates (petroleum), hydrotreated light	64742-47-8	Xn R:65 S:(2)-23-24-62
• Oleic acid	112-80-1	Not Listed

• Dipropylene glycol monomethyl ether	34590-94-8	Not Listed
• 2-Aminoethanol	141-43-5	C R:20/21/22-34 S:(1/2)-26-36/37/39-45
• 1,2-Propanediol	57-55-6	Not Listed
• Propane	74-98-6	F+ R:12 S:(2)-9-16
• Butane	106-97-8	F+ R:12 S:(2)-9-16
• Hydrotreated light naphthenic petroleum distillate (highly refined)	64742-53-6	T R:45 S:53-45
• Kerosene	8008-20-6	Xn R:65 S:(2)-23-24-62

EU - CLP (1272/2008) - Annex VI - Table 3.2 - Notes - Substances and Preparations

• Distillates (petroleum), hydrotreated light	64742-47-8	Not Listed
• Oleic acid	112-80-1	Not Listed
• Dipropylene glycol monomethyl ether	34590-94-8	Not Listed
• 2-Aminoethanol	141-43-5	Not Listed
• 1,2-Propanediol	57-55-6	Not Listed
• Propane	74-98-6	Not Listed
• Butane	106-97-8	C
• Hydrotreated light naphthenic petroleum distillate (highly refined)	64742-53-6	L
• Kerosene	8008-20-6	Not Listed

EU - CLP (1272/2008) - Annex VI - Table 3.2 - Safety Phrases

• Distillates (petroleum), hydrotreated light	64742-47-8	S:(2)-23-24-62
• Oleic acid	112-80-1	Not Listed
• Dipropylene glycol monomethyl ether	34590-94-8	Not Listed
• 2-Aminoethanol	141-43-5	S:(1/2)-26-36/37/39-45
• 1,2-Propanediol	57-55-6	Not Listed
• Propane	74-98-6	S:(2)-9-16
• Butane	106-97-8	S:(2)-9-16
• Hydrotreated light naphthenic petroleum distillate (highly refined)	64742-53-6	S:53-45
• Kerosene	8008-20-6	S:(2)-23-24-62

United States**Labor****U.S. - OSHA - Process Safety Management - Highly Hazardous Chemicals**

• Distillates (petroleum), hydrotreated light	64742-47-8	Not Listed
• Oleic acid	112-80-1	Not Listed
• Dipropylene glycol monomethyl ether	34590-94-8	Not Listed
• 2-Aminoethanol	141-43-5	Not Listed
• 1,2-Propanediol	57-55-6	Not Listed
• Propane	74-98-6	Not Listed
• Butane	106-97-8	Not Listed
• Hydrotreated light naphthenic petroleum distillate (highly refined)	64742-53-6	Not Listed
• Kerosene	8008-20-6	Not Listed

U.S. - OSHA - Specifically Regulated Chemicals

• Distillates (petroleum), hydrotreated light	64742-47-8	Not Listed
• Oleic acid	112-80-1	Not Listed
• Dipropylene glycol monomethyl ether	34590-94-8	Not Listed
• 2-Aminoethanol	141-43-5	Not Listed
• 1,2-Propanediol	57-55-6	Not Listed
• Propane	74-98-6	Not Listed
• Butane	106-97-8	Not Listed
• Hydrotreated light naphthenic petroleum distillate (highly refined)	64742-53-6	Not Listed
• Kerosene	8008-20-6	Not Listed

Environment**U.S. - CAA (Clean Air Act) - 1990 Hazardous Air Pollutants**

• Distillates (petroleum), hydrotreated light	64742-47-8	Not Listed
• Oleic acid	112-80-1	Not Listed
• Dipropylene glycol monomethyl ether	34590-94-8	Not Listed
• 2-Aminoethanol	141-43-5	Not Listed
• 1,2-Propanediol	57-55-6	Not Listed
• Propane	74-98-6	Not Listed
• Butane	106-97-8	Not Listed
• Hydrotreated light naphthenic petroleum distillate (highly refined)	64742-53-6	Not Listed
• Kerosene	8008-20-6	Not Listed

U.S. - CERCLA/SARA - Hazardous Substances and their Reportable Quantities

• Distillates (petroleum), hydrotreated light	64742-47-8	Not Listed
• Oleic acid	112-80-1	Not Listed
• Dipropylene glycol monomethyl ether	34590-94-8	Not Listed
• 2-Aminoethanol	141-43-5	Not Listed
• 1,2-Propanediol	57-55-6	Not Listed
• Propane	74-98-6	Not Listed
• Butane	106-97-8	Not Listed
• Hydrotreated light naphthenic petroleum distillate (highly refined)	64742-53-6	Not Listed
• Kerosene	8008-20-6	Not Listed

U.S. - CERCLA/SARA - Radionuclides and Their Reportable Quantities

• Distillates (petroleum), hydrotreated light	64742-47-8	Not Listed
• Oleic acid	112-80-1	Not Listed
• Dipropylene glycol monomethyl ether	34590-94-8	Not Listed
• 2-Aminoethanol	141-43-5	Not Listed
• 1,2-Propanediol	57-55-6	Not Listed
• Propane	74-98-6	Not Listed
• Butane	106-97-8	Not Listed
• Hydrotreated light naphthenic petroleum distillate (highly refined)	64742-53-6	Not Listed
• Kerosene	8008-20-6	Not Listed

U.S. - CERCLA/SARA - Section 302 Extremely Hazardous Substances EPCRA RQs

• Distillates (petroleum), hydrotreated light	64742-47-8	Not Listed
• Oleic acid	112-80-1	Not Listed
• Dipropylene glycol monomethyl ether	34590-94-8	Not Listed
• 2-Aminoethanol	141-43-5	Not Listed
• 1,2-Propanediol	57-55-6	Not Listed
• Propane	74-98-6	Not Listed
• Butane	106-97-8	Not Listed
• Hydrotreated light naphthenic petroleum distillate (highly refined)	64742-53-6	Not Listed
• Kerosene	8008-20-6	Not Listed

U.S. - CERCLA/SARA - Section 302 Extremely Hazardous Substances TPQs

• Distillates (petroleum), hydrotreated light	64742-47-8	Not Listed
• Oleic acid	112-80-1	Not Listed
• Dipropylene glycol monomethyl ether	34590-94-8	Not Listed
• 2-Aminoethanol	141-43-5	Not Listed
• 1,2-Propanediol	57-55-6	Not Listed
• Propane	74-98-6	Not Listed
• Butane	106-97-8	Not Listed

• Hydrotreated light naphthenic petroleum distillate (highly refined)	64742-53-6	Not Listed
• Kerosene	8008-20-6	Not Listed

U.S. - CERCLA/SARA - Section 313 - Emission Reporting

• Distillates (petroleum), hydrotreated light	64742-47-8	Not Listed
• Oleic acid	112-80-1	Not Listed
• Dipropylene glycol monomethyl ether	34590-94-8	Not Listed
• 2-Aminoethanol	141-43-5	Not Listed
• 1,2-Propanediol	57-55-6	Not Listed
• Propane	74-98-6	Not Listed
• Butane	106-97-8	Not Listed
• Hydrotreated light naphthenic petroleum distillate (highly refined)	64742-53-6	Not Listed
• Kerosene	8008-20-6	Not Listed

U.S. - CERCLA/SARA - Section 313 - PBT Chemical Listing

• Distillates (petroleum), hydrotreated light	64742-47-8	Not Listed
• Oleic acid	112-80-1	Not Listed
• Dipropylene glycol monomethyl ether	34590-94-8	Not Listed
• 2-Aminoethanol	141-43-5	Not Listed
• 1,2-Propanediol	57-55-6	Not Listed
• Propane	74-98-6	Not Listed
• Butane	106-97-8	Not Listed
• Hydrotreated light naphthenic petroleum distillate (highly refined)	64742-53-6	Not Listed
• Kerosene	8008-20-6	Not Listed

United States - California**Environment****U.S. - California - Proposition 65 - Carcinogens List**

• Distillates (petroleum), hydrotreated light	64742-47-8	Not Listed
• Oleic acid	112-80-1	Not Listed
• Dipropylene glycol monomethyl ether	34590-94-8	Not Listed
• 2-Aminoethanol	141-43-5	Not Listed
• 1,2-Propanediol	57-55-6	Not Listed
• Propane	74-98-6	Not Listed
• Butane	106-97-8	Not Listed
• Hydrotreated light naphthenic petroleum distillate (highly refined)	64742-53-6	Not Listed
• Kerosene	8008-20-6	Not Listed

U.S. - California - Proposition 65 - Developmental Toxicity

• Distillates (petroleum), hydrotreated light	64742-47-8	Not Listed
• Oleic acid	112-80-1	Not Listed
• Dipropylene glycol monomethyl ether	34590-94-8	Not Listed
• 2-Aminoethanol	141-43-5	Not Listed
• 1,2-Propanediol	57-55-6	Not Listed
• Propane	74-98-6	Not Listed
• Butane	106-97-8	Not Listed
• Hydrotreated light naphthenic petroleum distillate (highly refined)	64742-53-6	Not Listed
• Kerosene	8008-20-6	Not Listed

U.S. - California - Proposition 65 - Maximum Allowable Dose Levels (MADL)

• Distillates (petroleum), hydrotreated light	64742-47-8	Not Listed
• Oleic acid	112-80-1	Not Listed
• Dipropylene glycol monomethyl ether	34590-94-8	Not Listed

• 2-Aminoethanol	141-43-5	Not Listed
• 1,2-Propanediol	57-55-6	Not Listed
• Propane	74-98-6	Not Listed
• Butane	106-97-8	Not Listed
• Hydrotreated light naphthenic petroleum distillate (highly refined)	64742-53-6	Not Listed
• Kerosene	8008-20-6	Not Listed

U.S. - California - Proposition 65 - No Significant Risk Levels (NSRL)

• Distillates (petroleum), hydrotreated light	64742-47-8	Not Listed
• Oleic acid	112-80-1	Not Listed
• Dipropylene glycol monomethyl ether	34590-94-8	Not Listed
• 2-Aminoethanol	141-43-5	Not Listed
• 1,2-Propanediol	57-55-6	Not Listed
• Propane	74-98-6	Not Listed
• Butane	106-97-8	Not Listed
• Hydrotreated light naphthenic petroleum distillate (highly refined)	64742-53-6	Not Listed
• Kerosene	8008-20-6	Not Listed

U.S. - California - Proposition 65 - Reproductive Toxicity - Female

• Distillates (petroleum), hydrotreated light	64742-47-8	Not Listed
• Oleic acid	112-80-1	Not Listed
• Dipropylene glycol monomethyl ether	34590-94-8	Not Listed
• 2-Aminoethanol	141-43-5	Not Listed
• 1,2-Propanediol	57-55-6	Not Listed
• Propane	74-98-6	Not Listed
• Butane	106-97-8	Not Listed
• Hydrotreated light naphthenic petroleum distillate (highly refined)	64742-53-6	Not Listed
• Kerosene	8008-20-6	Not Listed

U.S. - California - Proposition 65 - Reproductive Toxicity - Male

• Distillates (petroleum), hydrotreated light	64742-47-8	Not Listed
• Oleic acid	112-80-1	Not Listed
• Dipropylene glycol monomethyl ether	34590-94-8	Not Listed
• 2-Aminoethanol	141-43-5	Not Listed
• 1,2-Propanediol	57-55-6	Not Listed
• Propane	74-98-6	Not Listed
• Butane	106-97-8	Not Listed
• Hydrotreated light naphthenic petroleum distillate (highly refined)	64742-53-6	Not Listed
• Kerosene	8008-20-6	Not Listed

United States - Pennsylvania**Labor****U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List**

• Distillates (petroleum), hydrotreated light	64742-47-8	Not Listed
• Oleic acid	112-80-1	Not Listed
• Dipropylene glycol monomethyl ether	34590-94-8	Not Listed
• 2-Aminoethanol	141-43-5	Not Listed
• 1,2-Propanediol	57-55-6	Not Listed
• Propane	74-98-6	Not Listed
• Butane	106-97-8	Not Listed
• Hydrotreated light naphthenic petroleum distillate (highly refined)	64742-53-6	Not Listed
• Kerosene	8008-20-6	Not Listed

U.S. - Pennsylvania - RTK (Right to Know) - Special Hazardous Substances

• Distillates (petroleum), hydrotreated light	64742-47-8	Not Listed
• Oleic acid	112-80-1	Not Listed
• Dipropylene glycol monomethyl ether	34590-94-8	Not Listed
• 2-Aminoethanol	141-43-5	Not Listed
• 1,2-Propanediol	57-55-6	Not Listed
• Propane	74-98-6	Not Listed
• Butane	106-97-8	Not Listed
• Hydrotreated light naphthenic petroleum distillate (highly refined)	64742-53-6	Not Listed
• Kerosene	8008-20-6	Not Listed

15.2 Chemical Safety Assessment

- No Chemical Safety Assessment has been carried out.

Section 16 - Other Information

Relevant Phrases (code & full text)

- H220 - Extremely flammable gas
H280 - Contains gas under pressure; may explode if heated
H302 - Harmful if swallowed
H304 - May be fatal if swallowed and enters airways
H312 - Harmful in contact with skin
H314 - Causes severe skin burns and eye damage.
H315 - Causes skin irritation
H332 - Harmful if inhaled
H350 - May cause cancer.
R12 - Extremely flammable.
R20/21/22 - Harmful by inhalation, in contact with skin and if swallowed.
R34 - Causes burns.
R38 - Irritating to skin.
R45 - May cause cancer.
R65 - Harmful: may cause lung damage if swallowed.

Last Revision Date

- 05/March/2015

Preparation Date

- 05/March/2015

Disclaimer/Statement of Liability

- The data here is for hazard communication to our employees, our customers and their employees, and authorized regulatory agencies. For the intended purpose, this SDS (Safety data Sheet) may be duplicated or the data transcribed to an alternative form. NOTE: The information contained herein is provided in good faith and is believed to be correct as of the date hereof. However, Birchwood Casey LLC makes no representation as to the comprehensiveness or accuracy of the information. It is expected that individuals receiving the information will exercise their independent judgment in determining its appropriateness for a particular period. Accordingly, Birchwood Casey LLC will not be responsible for damages of any kind resulting from the use of or reliance upon such information. NO REPRESENTATIONS, OR WARRANTIES, EITHER EXPRESSED OR IMPLIED, OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR ANY OTHER NATURE ARE MADE HEREUNDER TO WHICH THE INFORMATION REFERS. The responsibility to provide a safe workplace remains with the user. The user should consider the health hazards and safety information contained herein as a guide and should take those precautions required in an individual operation to instruct employees and develop work practice procedures for a safe work environment.

Key to abbreviations

NDA = No data available