

Safety Data Sheet



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

1.1 Product identifier

- Product Name** • **Barricade Rust Protection: aerosol**
- Synonyms** • Barricade(R) (formerly Sheath(R)) Rust Preventive Aerosol; Barricade(R) Rust Preventive Aerosol
- Product Code** • 33126; 33135; 33140; 33389; BPA10; BPA2; BPA6

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

- Relevant identified use(s)** • A moisture displacing rust protectant for firearms

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
 - Aspiration 1 - H304
 - Skin Irritation 2 - H315
 - Eye Irritation 2 - H319
 - Specific Target Organ Toxicity Single Exposure 3: Respiratory Tract Irritation - H335
 - Specific Target Organ Toxicity Single Exposure 3: Narcotic Effects - H336
- DSD/DPD**
- Highly Flammable (F)
 - Harmful (Xn)
 - Irritant (Xi)
 - R11, R67, R36/37/38, R65

2.2 Label Elements

CLP

DANGER



- Hazard statements** • H223 - Flammable aerosol
 H229 - Pressurised container: May burst if heated
 H304 - May be fatal if swallowed and enters airways
 H315 - Causes skin irritation
 H319 - Causes serious eye irritation
 H335 - May cause respiratory irritation
 H336 - May cause drowsiness or dizziness

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.
 P261 - Avoid breathing fume/gas/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.
 P337+P313 - If eye irritation persists: Get medical advice/attention.
 P301+P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
 P331 - Do NOT induce vomiting.
- 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.
 R36/37/38 - Irritating to eyes, respiratory system and skin.
 R65 - Harmful: may cause lung damage if swallowed.
 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.

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
Aspiration 1
Skin Irritation 2
Eye Irritation 2A
Specific Target Organ Toxicity Single Exposure 3: Respiratory Tract Irritation
Specific Target Organ Toxicity Single Exposure 3: Narcotic Effects

2.2 Label elements

OSHA HCS 2012

DANGER



- Hazard statements**
- Flammable aerosol
May be fatal if swallowed and enters airways
Causes skin irritation
Causes serious eye irritation
May cause respiratory irritation
May cause drowsiness or dizziness

Precautionary statements

- Prevention**
- 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.
Avoid breathing fume/gas/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 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.
If eye irritation persists: Get medical advice/attention.
IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
Do NOT induce vomiting.
- 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

2.2 Label elements

WHMIS



- Flammable Aerosols - B5
- Other Toxic Effects - D2B

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	47%	NDA	EU DSD/DPD: Annex VI, Table 3.2: Xn, R65 EU CLP: Annex VI, Table 3.1: Asp. Tox. 1, H304 OSHA HCS 2012: Data lacking	NDA
Propane	CAS:74-98-6 EC Number:200-827-9 EU Index:601-003-00-5	18%	NDA	EU DSD/DPD: Annex VI, Table 3.2: F+, R12 EU CLP: Annex VI, Table 3.1: Flam. Gas 1, H220; Press. Gas - Comp. 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	14%	Inhalation-Rat LC50 • 658 g/m ³ 4 Hour(s)	EU DSD/DPD: 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
Barium dinonyl naphthalene sulfonate	CAS:25619-56-1 EINECS:247-132-7	11%	NDA	EU DSD/DPD: Xi; R36/38 EU CLP: Eye Irrit. 2, H319; Skin Irrit. 2, H315 OSHA HCS 2012: Skin Irrit. 2; Eye Irrit. 2	NDA
	CAS:64742-52-				

Hydrotreated heavy naphthenic distillates (petroleum) (Highly Refined)	5 EC Number:265-155-0 EU Index:649-465-00-7	8%	NDA	EU DSD/DPD: Annex VI, Table 3.2: Carc.Cat.2, R45 EU CLP: Annex VI, Table 3.1: Carc. 1B, H350 OSHA HCS 2012: Skin Irrit. 2	Carcinogen classifications not applicable, contains less than 3.0 % w/w DMSO
2-Propanol, 1-methoxy-	CAS:107-98-2 EC Number:203-539-1 EU Index:603-064-00-3	2%	Inhalation-Rat LC50 • 10000 ppm 5 Hour(s) Skin-Rabbit LD50 • 13 g/kg Ingestion/Oral-Rat LD50 • 6600 mg/kg	EU DSD/DPD: Annex VI, Table 3.2: R10; R67 EU CLP: Annex VI, Table 3.1: Flam. Liq. 3, H226; STOT SE 3: Narc., H336 OSHA HCS 2012: STOT SE 3: Narc; Eye Irrit. 2B	NDA

See Section 16 for full text of H-statements and R-phrases.

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

- In case of contact with substance, immediately flush skin with running water for at least 20 minutes. Remove and isolate contaminated clothing. 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

- 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 • Water spray, carbon dioxide, dry chemical, foam.

Unsuitable Extinguishing Media

- Water may be unsuitable as an extinguishing medium, but helpful in keeping adjacent containers cool.

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. 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. Keep away from heat and ignition sources – No Smoking. All equipment used when handling the product must be grounded. Take precautionary measures against static charges. Empty containers may still have product residue and flammable vapors. Do not puncture or incinerate container. Wear appropriate personal protective equipment, avoid direct contact. Avoid breathing mist, vapours, spray. Avoid contact with skin, eyes, and clothing. 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 tightly closed container. Store in a cool, dry, well-ventilated place. Keep away from sources of ignition – No Smoking. 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	Germany DFG	Germany TRGS
2-Propanol, 1-methoxy- (107-98-2)	STELs	100 ppm STEL	150 ppm STEL	150 ppm STEV; 553 mg/m ³ STEV	Not established	Not established
	TWAs	50 ppm TWA	100 ppm TWA	100 ppm TWAEV; 369 mg/m ³ TWAEV	Not established	100 ppm TWA AGW (The risk of damage to the embryo or fetus can be excluded when AGW and BGW values are observed, exposure factor 2); 370 mg/m ³ TWA AGW (The risk of damage to the embryo or fetus can be excluded when AGW and BGW values are observed, exposure factor 2)
	Ceilings	Not established	Not established	Not established	200 ppm Peak; 740 mg/m ³ Peak	Not established
	MAKs	Not established	Not established	Not established	100 ppm TWA MAK; 370 mg/m ³ TWA MAK	Not established
Butane (106-97-8)	TWAs	Not established	800 ppm TWA (listed under Aliphatic hydrocarbon gases)	800 ppm TWAEV; 1900 mg/m ³ TWAEV	Not established	1000 ppm TWA AGW (exposure factor 4); 2400 mg/m ³ TWA AGW (exposure factor 4)
	STELs	1000 ppm STEL	Not established	Not established	Not established	Not established
	Ceilings	Not established	Not established	Not established	4000 ppm Peak (listed under Butane); 9600 mg/m ³ Peak (listed under Butane)	Not established
	MAKs	Not established	Not established	Not established	1000 ppm TWA MAK; 2400 mg/m ³ TWA MAK	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/m ³ TWAEV	Not established	1000 ppm TWA AGW (exposure factor 4); 1800 mg/m ³ TWA AGW (exposure factor 4)
	Ceilings	Not established	Not established	Not established	4000 ppm Peak; 7200 mg/m ³ Peak	Not established
	MAKs	Not established	Not established	Not established	1000 ppm TWA MAK; 1800 mg/m ³ TWA MAK	Not established
Distillates (petroleum), hydrotreated light (64742-47-8)	Ceilings	Not established	Not established	Not established	40 ppm Peak; 280 mg/m ³ Peak	Not established
	MAKs	Not established	Not established	Not established	20 ppm TWA MAK; 140 mg/m ³ TWA MAK	Not established

Exposure Limits/Guidelines (Con't.)			
	Result	NIOSH	OSHA
2-Propanol, 1-methoxy- (107-98-2)	STELs	150 ppm STEL; 540 mg/m ³ STEL	Not established
	TWAs	100 ppm TWA; 360 mg/m ³ TWA	Not established
Butane (106-97-8)	TWAs	800 ppm TWA; 1900 mg/m ³ TWA	Not established
Propane (74-98-6)	TWAs	1000 ppm TWA; 1800 mg/m ³ TWA	1000 ppm TWA; 1800 mg/m ³ TWA

Exposure Control Notations

ACGIH

•2-Propanol, 1-methoxy- (107-98-2): **Carcinogens:** (A4 - Not Classifiable as a Human Carcinogen)

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)

•2-Propanol, 1-methoxy- (107-98-2): **Pregnancy:** (no risk to embryo/fetus if exposure limits adhered to)

Exposure Limits Supplemental

ACGIH

•Propane (74-98-6): **TLV Basis - Critical Effects:** (asphyxia (See Appendix F: Minimal Oxygen Content))

•Butane (106-97-8): **TLV Basis - Critical Effects:** (CNS impairment)

•2-Propanol, 1-methoxy- (107-98-2): **TLV Basis - Critical Effects:** (eye and upper respiratory tract 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

- In case of insufficient ventilation, wear suitable respiratory equipment. 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)

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

TWAEV = Time-Weighted Average Exposure Value

Section 9 - Physical and Chemical Properties

9.1 Information on Physical and Chemical Properties

Material Description			
Physical Form	Liquid	Appearance/Description	Opaque light brown liquid with a solvent odor.
Color	Light brown.	Odor	Solvent
Odor Threshold	Data lacking		
General Properties			
Boiling Point	-44 to -300 F(-42.2222 to -184.4444 C)	Melting Point/Freezing Point	Data lacking
Decomposition Temperature	Data lacking	pH	Data lacking
Specific Gravity/Relative Density	< 1 Water=1	Water Solubility	Negligible
Viscosity	Data lacking	Explosive Properties	Data lacking
Oxidizing Properties:	Data lacking		
Volatility			
Vapor Pressure	67 psig	Vapor Density	> 1 Air=1
Evaporation Rate	< 1 Ether = 1	Volatiles (Vol.)	80 %
Flammability			
Flash Point	-156 F(-104.4444 C) (based on propellant)	UEL	9.5 %
LEL	1.8 %	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 (14%)	106-97-8	Acute Toxicity: Inhalation-Rat LC50 • 658 g/m ³ 4 Hour(s)
Hydrotreated heavy naphthenic distillates (petroleum) (Highly Refined) (8%)	64742-52-5	Irritation: Skin-Rabbit • 500 mg • Severe irritation
2-Propanol, 1-methoxy- (2%)	107-98-2	Acute Toxicity: Ingestion/Oral-Rat LD50 • 6600 mg/kg; <i>Brain and Coverings:Other degenerative changes; Behavioral:General anesthetic; Lungs, Thorax, or Respiration:Dyspnea</i> ; Inhalation-Rat LC50 • 10000 ppm 5 Hour(s); Irritation: Eye-Rabbit • 500 mg 24 Hour(s) • Mild irritation
Barium dinonyl naphthalene sulfonate (11%)	25619-56-1	Acute Toxicity: Ingestion/Oral-Rat LD50 • >5000 mg/kg; Skin-Rabbit LD50 • >2 mL/kg; Irritation: Eye-Rabbit • 0.1 mL • Severe irritation; Skin-Rabbit • 0.5 mL • Moderate irritation

GHS Properties	Classification
Acute toxicity	EU/CLP • Data lacking OSHA HCS 2012 • Data lacking
Aspiration Hazard	EU/CLP • Aspiration 1 OSHA HCS 2012 • Aspiration 1
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 • Data lacking OSHA HCS 2012 • Data lacking
STOT-SE	EU/CLP • Specific Target Organ Toxicity Single Exposure 3: Narcotic Effects; Specific Target Organ Toxicity Single Exposure 3: Respiratory Tract Irritation OSHA HCS 2012 • Specific Target Organ Toxicity Single Exposure 3: Narcotic Effects; Specific Target Organ Toxicity Single Exposure 3: Respiratory Tract Irritation
Toxicity for Reproduction	EU/CLP • Data lacking OSHA HCS 2012 • Data lacking
Respiratory sensitization	EU/CLP • Data lacking OSHA HCS 2012 • Data lacking
Serious eye damage/Irritation	EU/CLP • Eye Irritation 2 OSHA HCS 2012 • Eye Irritation 2A

Potential Health Effects

Inhalation

Acute (Immediate)

- May cause respiratory irritation. 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 irritation.
- Chronic (Delayed)**
- No data available.
- Ingestion**
- Acute (Immediate)**
- Material may be aspirated into lungs during ingestion and/or subsequent vomiting. Aspiration of this material will cause severe lung injury, chemical pneumonitis, pulmonary edema or death.
- Chronic (Delayed)**
- No data available.

Key to abbreviations

LC = Lethal Concentration

LD = Lethal 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/MDG	UN1950	AEROSOLS	2.1	NDA	NDA

IATA/ICAO	UN1950	Aerosols, flammable	2.1	NDA	NDA
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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, Fire, Pressure(Sudden Release of)

State Right To Know				
Component	CAS	MA	NJ	PA
2-Propanol, 1-methoxy-	107-98-2	Yes	Yes	Yes
Barium dinonyl naphthalene sulfonate	25619-56-1	No	No	No
Butane	106-97-8	Yes	Yes	Yes
Distillates (petroleum), hydrotreated light	64742-47-8	No	No	No
Hydrotreated heavy naphthenic distillates (petroleum) (Highly Refined)	64742-52-5	No	No	No
Propane	74-98-6	Yes	Yes	Yes

Inventory						
Component	CAS	Canada DSL	Canada NDSL	China	EU EINECS	EU ELNICS
2-Propanol, 1-methoxy-	107-98-2	Yes	No	Yes	Yes	No
Barium dinonyl naphthalene sulfonate	25619-56-1	Yes	No	Yes	Yes	No
Butane	106-97-8	Yes	No	Yes	Yes	No
Distillates (petroleum), hydrotreated light	64742-47-8	Yes	No	Yes	Yes	No
Hydrotreated heavy naphthenic distillates (petroleum) (Highly Refined)	64742-52-5	Yes	No	Yes	Yes	No
Propane	74-98-6	Yes	No	Yes	Yes	No

Inventory (Con't.)		
Component	CAS	TSCA

2-Propanol, 1-methoxy-	107-98-2	Yes
Barium dinonyl naphthalene sulfonate	25619-56-1	Yes
Butane	106-97-8	Yes
Distillates (petroleum), hydrotreated light	64742-47-8	Yes
Hydrotreated heavy naphthenic distillates (petroleum) (Highly Refined)	64742-52-5	Yes
Propane	74-98-6	Yes

Canada

Labor

Canada - WHMIS - Classifications of Substances

• Distillates (petroleum), hydrotreated light	64742-47-8	Not Listed
• Hydrotreated heavy naphthenic distillates (petroleum) (Highly Refined)	64742-52-5	Not Listed
• Propane	74-98-6	A, B1
• Butane	106-97-8	A, B1
• 2-Propanol, 1-methoxy-	107-98-2	B2
• Barium dinonyl naphthalene sulfonate	25619-56-1	Not Listed

Canada - WHMIS - Ingredient Disclosure List

• Distillates (petroleum), hydrotreated light	64742-47-8	Not Listed
• Hydrotreated heavy naphthenic distillates (petroleum) (Highly Refined)	64742-52-5	Not Listed
• Propane	74-98-6	Not Listed
• Butane	106-97-8	1 %
• 2-Propanol, 1-methoxy-	107-98-2	1 %
• Barium dinonyl naphthalene sulfonate	25619-56-1	Not Listed

Environment

Canada - CEPA - Priority Substances List

• Distillates (petroleum), hydrotreated light	64742-47-8	Not Listed
• Hydrotreated heavy naphthenic distillates (petroleum) (Highly Refined)	64742-52-5	Not Listed
• Propane	74-98-6	Not Listed
• Butane	106-97-8	Not Listed
• 2-Propanol, 1-methoxy-	107-98-2	Not Listed
• Barium dinonyl naphthalene sulfonate	25619-56-1	Not Listed

Europe

Other

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

• Distillates (petroleum), hydrotreated light	64742-47-8	Xn; R65
• Hydrotreated heavy naphthenic distillates (petroleum) (Highly Refined)	64742-52-5	Carc.Cat.2; R45
• Propane	74-98-6	F+; R12
• Butane	106-97-8	F+; R12
• 2-Propanol, 1-methoxy-	107-98-2	R10 R67
• Barium dinonyl naphthalene sulfonate	25619-56-1	Not Listed

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

• Distillates (petroleum), hydrotreated light	64742-47-8	Not Listed
• Hydrotreated heavy naphthenic distillates (petroleum) (Highly Refined)	64742-52-5	Not Listed
• Propane	74-98-6	Not Listed
• Butane	106-97-8	Not Listed
• 2-Propanol, 1-methoxy-	107-98-2	Not Listed
• Barium dinonyl naphthalene sulfonate	25619-56-1	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
• Hydrotreated heavy naphthenic distillates (petroleum) (Highly Refined)	64742-52-5	T R:45 S:53-45
• Propane	74-98-6	F+ R:12 S:(2)-9-16
• Butane	106-97-8	F+ R:12 S:(2)-9-16
• 2-Propanol, 1-methoxy-	107-98-2	R:10-67 S:(2)
• Barium dinonyl naphthalene sulfonate	25619-56-1	Not Listed

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

• Distillates (petroleum), hydrotreated light	64742-47-8	Not Listed
• Hydrotreated heavy naphthenic distillates (petroleum) (Highly Refined)	64742-52-5	L
• Propane	74-98-6	Not Listed
• Butane	106-97-8	C
• 2-Propanol, 1-methoxy-	107-98-2	Not Listed
• Barium dinonyl naphthalene sulfonate	25619-56-1	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
• Hydrotreated heavy naphthenic distillates (petroleum) (Highly Refined)	64742-52-5	S:53-45
• Propane	74-98-6	S:(2)-9-16
• Butane	106-97-8	S:(2)-9-16
• 2-Propanol, 1-methoxy-	107-98-2	S:(2)
• Barium dinonyl naphthalene sulfonate	25619-56-1	Not Listed

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

• Distillates (petroleum), hydrotreated light	64742-47-8	Not Listed
• Hydrotreated heavy naphthenic distillates (petroleum) (Highly Refined)	64742-52-5	Not Listed
• Propane	74-98-6	Not Listed
• Butane	106-97-8	Not Listed
• 2-Propanol, 1-methoxy-	107-98-2	Not Listed
• Barium dinonyl naphthalene sulfonate	25619-56-1	Not Listed

U.S. - OSHA - Specifically Regulated Chemicals

• Distillates (petroleum), hydrotreated light	64742-47-8	Not Listed
• Hydrotreated heavy naphthenic distillates (petroleum) (Highly Refined)	64742-52-5	Not Listed
• Propane	74-98-6	Not Listed
• Butane	106-97-8	Not Listed
• 2-Propanol, 1-methoxy-	107-98-2	Not Listed
• Barium dinonyl naphthalene sulfonate	25619-56-1	Not Listed

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

• Distillates (petroleum), hydrotreated light	64742-47-8	Not Listed
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• Hydrotreated heavy naphthenic distillates (petroleum) (Highly Refined)	64742-52-5	Not Listed
• Propane	74-98-6	Not Listed
• Butane	106-97-8	Not Listed
• 2-Propanol, 1-methoxy-	107-98-2	Not Listed
• Barium dinonyl naphthalene sulfonate	25619-56-1	Not Listed

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

• Distillates (petroleum), hydrotreated light	64742-47-8	Not Listed
• Hydrotreated heavy naphthenic distillates (petroleum) (Highly Refined)	64742-52-5	Not Listed
• Propane	74-98-6	Not Listed
• Butane	106-97-8	Not Listed
• 2-Propanol, 1-methoxy-	107-98-2	Not Listed
• Barium dinonyl naphthalene sulfonate	25619-56-1	Not Listed

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

• Distillates (petroleum), hydrotreated light	64742-47-8	Not Listed
• Hydrotreated heavy naphthenic distillates (petroleum) (Highly Refined)	64742-52-5	Not Listed
• Propane	74-98-6	Not Listed
• Butane	106-97-8	Not Listed
• 2-Propanol, 1-methoxy-	107-98-2	Not Listed
• Barium dinonyl naphthalene sulfonate	25619-56-1	Not Listed

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

• Distillates (petroleum), hydrotreated light	64742-47-8	Not Listed
• Hydrotreated heavy naphthenic distillates (petroleum) (Highly Refined)	64742-52-5	Not Listed
• Propane	74-98-6	Not Listed
• Butane	106-97-8	Not Listed
• 2-Propanol, 1-methoxy-	107-98-2	Not Listed
• Barium dinonyl naphthalene sulfonate	25619-56-1	Not Listed

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

• Distillates (petroleum), hydrotreated light	64742-47-8	Not Listed
• Hydrotreated heavy naphthenic distillates (petroleum) (Highly Refined)	64742-52-5	Not Listed
• Propane	74-98-6	Not Listed
• Butane	106-97-8	Not Listed
• 2-Propanol, 1-methoxy-	107-98-2	Not Listed
• Barium dinonyl naphthalene sulfonate	25619-56-1	Not Listed

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

• Distillates (petroleum), hydrotreated light	64742-47-8	Not Listed
• Hydrotreated heavy naphthenic distillates (petroleum) (Highly Refined)	64742-52-5	Not Listed
• Propane	74-98-6	Not Listed
• Butane	106-97-8	Not Listed
• 2-Propanol, 1-methoxy-	107-98-2	Not Listed
• Barium dinonyl naphthalene sulfonate	25619-56-1	Not Listed

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

• Distillates (petroleum), hydrotreated light	64742-47-8	Not Listed
• Hydrotreated heavy naphthenic distillates (petroleum) (Highly Refined)	64742-52-5	Not Listed
• Propane	74-98-6	Not Listed
• Butane	106-97-8	Not Listed
• 2-Propanol, 1-methoxy-	107-98-2	Not Listed
• Barium dinonyl naphthalene sulfonate	25619-56-1	Not Listed

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

• Distillates (petroleum), hydrotreated light	64742-47-8	Not Listed
• Hydrotreated heavy naphthenic distillates (petroleum) (Highly Refined)	64742-52-5	Not Listed
• Propane	74-98-6	Not Listed
• Butane	106-97-8	Not Listed
• 2-Propanol, 1-methoxy-	107-98-2	Not Listed
• Barium dinonyl naphthalene sulfonate	25619-56-1	Not Listed

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

• Distillates (petroleum), hydrotreated light	64742-47-8	Not Listed
• Hydrotreated heavy naphthenic distillates (petroleum) (Highly Refined)	64742-52-5	Not Listed
• Propane	74-98-6	Not Listed
• Butane	106-97-8	Not Listed
• 2-Propanol, 1-methoxy-	107-98-2	Not Listed
• Barium dinonyl naphthalene sulfonate	25619-56-1	Not Listed

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

• Distillates (petroleum), hydrotreated light	64742-47-8	Not Listed
• Hydrotreated heavy naphthenic distillates (petroleum) (Highly Refined)	64742-52-5	Not Listed
• Propane	74-98-6	Not Listed
• Butane	106-97-8	Not Listed
• 2-Propanol, 1-methoxy-	107-98-2	Not Listed
• Barium dinonyl naphthalene sulfonate	25619-56-1	Not Listed

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

• Distillates (petroleum), hydrotreated light	64742-47-8	Not Listed
• Hydrotreated heavy naphthenic distillates (petroleum) (Highly Refined)	64742-52-5	Not Listed
• Propane	74-98-6	Not Listed
• Butane	106-97-8	Not Listed
• 2-Propanol, 1-methoxy-	107-98-2	Not Listed
• Barium dinonyl naphthalene sulfonate	25619-56-1	Not Listed

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

• Distillates (petroleum), hydrotreated light	64742-47-8	Not Listed
• Hydrotreated heavy naphthenic distillates (petroleum) (Highly Refined)	64742-52-5	Not Listed
• Propane	74-98-6	Not Listed
• Butane	106-97-8	Not Listed
• 2-Propanol, 1-methoxy-	107-98-2	Not Listed
• Barium dinonyl naphthalene sulfonate	25619-56-1	Not Listed

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

• Distillates (petroleum), hydrotreated light	64742-47-8	Not Listed
• Hydrotreated heavy naphthenic distillates (petroleum) (Highly Refined)	64742-52-5	Not Listed
• Propane	74-98-6	Not Listed
• Butane	106-97-8	Not Listed
• 2-Propanol, 1-methoxy-	107-98-2	Not Listed
• Barium dinonyl naphthalene sulfonate	25619-56-1	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
• Hydrotreated heavy naphthenic distillates (petroleum) (Highly Refined)	64742-52-5	Not Listed
• Propane	74-98-6	Not Listed
• Butane	106-97-8	Not Listed
• 2-Propanol, 1-methoxy-	107-98-2	Not Listed
• Barium dinonyl naphthalene sulfonate	25619-56-1	Not Listed

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

• Distillates (petroleum), hydrotreated light	64742-47-8	Not Listed
• Hydrotreated heavy naphthenic distillates (petroleum) (Highly Refined)	64742-52-5	Not Listed
• Propane	74-98-6	Not Listed
• Butane	106-97-8	Not Listed
• 2-Propanol, 1-methoxy-	107-98-2	Not Listed
• Barium dinonyl naphthalene sulfonate	25619-56-1	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
- H226 - Flammable liquid and vapour
- H280 - Contains gas under pressure; may explode if heated
- H336 - May cause drowsiness or dizziness
- H350 - May cause cancer.
- R10 - Flammable.
- R12 - Extremely flammable.
- R36/38 - Irritating to eyes and skin.
- R45 - May cause cancer.
- R67 - Vapours may cause drowsiness and dizziness.

Last Revision Date

- 14/July/2015

Preparation Date

- 14/July/2015

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Key to abbreviations

NDA = No data available