Safety Data Sheet



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

1.1 Product identifier

Product Name BlackIce Aerosol

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

Relevant identified use(s) Lubricant

1.3 Details of the supplier of the safety data sheet

Manufacturer | Superior Graphite

10 S. Riverside Plaza Chicago, IL 60606 United States

Telephone (General) 1312-559-2999 - (8am-5pm CST, M-F)

1.4 Emergency telephone number

Manufacturer 1-800-424-9300-For Hazardous Materials [or Dangerous Goods] Incident Spill, Leak,

Fire, Exposure, or Accident Call CHEMTREC Day or Night

Manufacturer +1703-527-3887 - Outside USA and Canada (collect calls accepted)

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 I Flammable Aerosols 1 - H222

Skin Irritation 2 - H315

Hazardous to the aquatic environment Chronic 2 - H411

DSD/DPD ■ Extremely Flammable (F+)

Harmful (Xn)

Dangerous to the Environment (N)

R12, R51, R53

2.2 Label Elements

CLP

DANGER









Hazard statements | H222 - Extremely flammable aerosol H315 - Causes skin irritation

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Format: EU CLP/REACH Language: English (US)

WHMIS, EU CLP, EU DSD/DPD, OSHA HCS 2012

H411 - Toxic to aquatic life with long lasting effects

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 gas/mist/vapours/spray.

P264 - Wash thoroughly after handling.

P273 - Avoid release to the environment.

P280 - Wear protective gloves/protective clothing/eye protection/face protection.

Response | P391 - Collect spillage.

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.

P314 - Get medical advice/attention if you feel unwell.

Storage/Disposal, 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 R12-Extremely flammable.

R48/20 - Harmful: danger of serious damage to health by prolonged exposure through inhalation.

R51 - Toxic to aquatic organisms.

R53 - May cause long-term adverse effects in the aquatic environment.

Safety phrases, S9-Keep container in a well ventilated place

S16 - Keep away from sources of ignition - No Smoking.

S57 - Use appropriate containment to avoid environmental contamination.

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 1 Skin Irritation 2 Eye Irritation 2

2.2 Label elements

OSHA HCS 2012

DANGER







Hazard statements | Extremely flammable aerosol

Causes skin irritation

Causes serious eye irritation

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.

Do not breathe gas/mist/vapours/spray.

Wash thoroughly after handling.

Wear protective gloves/protective clothing/eye protection/face protection.

Response I If on skin: Wash with plenty of water.

Specific treatment, see supplemental first aid information. Take off contaminated clothing and wash before reuse.

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.

Get medical advice/attention if you feel unwell.

Storage/Disposal, 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 - D2A

2.2 Label elements

WHMIS





Flammable Aerosols - B5 Other Toxic Effects - D2A

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

Graphite	CAS:7782-42-5 EC Number:231- 955-3	< 20%	NDA	EU DSD/DPD: Not Classified EU CLP: Not Classified OSHA HCS 2012: Comb. Dust	NDA
Heptane	CAS:142-82-5 EC Number:205- 563-8 EU Index:601- 008-00-2	5% TO 15%	Inhalation-Rat LC50 • 103 g/m³ 4 Hour(s)	EU DSD/DPD: Annex VI, Table 3.2: F; R11 Xi; R38 N; R50-53 Xn; R65 R67 EU CLP: Annex VI, Table 3.1: Flam. Liq. 2, H225; Asp. Tox. 1, H304; Skin Irrit. 2, H315; STOT SE 3: Narc., H336; Aquatic Acute 1, H400; Aquatic Chronic 1, H410 OSHA HCS 2012: Flam. Liq. 2; Skin Irrit. 2; Eye Irrit. 2; Asp. Tox. 1; STOT SE 3: Narc.	NDA
Propane	CAS:74-98-6 EC Number:200- 827-9 EU Index:601- 003-00-5	3% TO 10%	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., H280 OSHA HCS 2012: Flam. Gas 1; Press. Gas - Comp.; Simp. Asphyx.	NDA
Isobutane	CAS:75-28-5 EC Number:200- 857-2	1% TO 6%	Inhalation-Rat LC50 • 57 pph 15 Minute(s)	EU DSD/DPD: Annex VI, Table 3.2: F+; R12 EU CLP: Annex VI, Table 3.1: Flam. Gas. 1, H220; Press. Gas - Liq., H280 OSHA HCS 2012: Flam. Gas 1; Press. Gas - Liq.; Simp. Asphyx.	NDA
Quartz	CAS:14808-60-7 EC Number:238- 878-4	< 0.1%	NDA	EU CLP: Community workplace exposure limit OSHA HCS 2012: Exposure limit(s)	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

■ IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If signs/symptoms continue, get medical attention. Administer oxygen if breathing is difficult. Give artificial respiration if victim is not breathing.

Skin

In case of contact with substance, immediately flush skin with running water for at least 20 minutes. For minor skin contact, avoid spreading material on unaffected skin. Get medical attention immediately if symptoms occur.

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 swallowed, DONOT induce vomiting. Get medical attention.

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 FIRE: Water spray, fog or regular foam.

SMALL FIRES: Dry chemical, CO2, water spray or regular foam.

Unsuitable Extinguishing | No data available

Media

5.2 Special hazards arising from the substance or mixture

Unusual Fire and Explosion Hazards

| Closed containers may explode from internal pressure build-up when exposed to extreme heat and discharge contents.

Vapors may travel to source of ignition and flash back.

Vapors may form explosive mixtures with air.

Overexposure to decomposition products may cause a health hazard. Symptoms may not be immediately apparent. Obtain medical attention.

Hazardous Combustion Products

On burning, may release carbon dioxide and carbon monoxide.

5.3 Advice for firefighters

Structural firefighters' protective clothing provides limited protection in fire situations ONLY; it is not effective in spill situations where direct contact with the substance is possible.

Wear chemical protective clothing that is specifically recommended by the manufacturer. It may provide little or no thermal protection.

Wear positive pressure self-contained breathing apparatus (SCBA).

Water may be used to cool containers to prevent pressure build-up and explosion when exposed to extreme heat.

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

ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). As an immediate precautionary measure, isolate spill or leak area for at least 50 meters (150 feet) in all directions. Keep unauthorized personnel away. Stay upwind. Ventilate closed spaces before entering. Keep out of low areas.

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

¹ Clean up area with absorbent material and place in closed containers for disposal. Wash floor with soap and water.

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

■ Keep away from heat and ignition sources – No Smoking. Take precautionary measures against static charges. All equipment used when handling the product must be grounded. Do not puncture or incinerate (burn) cans. Do not stick a pin, nail or any other sharp object into opening on top of can. Use only with adequate ventilation. Use good safety and industrial hygiene practices. Wear appropriate personal protective equipment, avoid direct contact. Do not breathe (dust, vapor or spray mist) Avoid contact with eyes, skin and clothing. Do not use near ignition sources such as sparks or open flames. Do not cut, drill or weld on containers. Even empty containers may contain residue that will support a flame or explode when exposed to a spark, flame or other source of ignition. Do not eat, drink or smoke when using this product. After handling wash hands thoroughly.

7.2 Conditions for safe storage, including any incompatibilities

Storage | Store in a cool, dry, well-ventilated place. Keep away from heat, sparks, and flame. Do

not store at temperatures >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	NIOSH	OSHA
Quartz (14808-60-7)	TWAs	0.025 mg/m3 TWA (respirable fraction)	0.05 mg/m3 TWA (respirable dust)	Not established
Isobutane	STELs	1000 ppm STEL	Not established	Not established
(75-28-5)	TWAs	Not established	800 ppm TWA; 1900 mg/m3 TWA	Not established
Propane (74-98-6)	TWAs	1000 ppm TWA (listed under Aliphatic hydrocarbon gases: Alkane C1-4)	1000 ppm TWA; 1800 mg/m3 TWA	1000 ppm TWA; 1800 mg/m3 TWA
	TWAs	400 ppm TWA (listed under Heptane, all isomers)	85 ppm TWA; 350 mg/m3 TWA	500 ppm TWA; 2000 mg/m3 TWA
Heptane (142-82-5)	STELs	500 ppm STEL (listed under Heptane, all isomers)	Not established	Not established
	Ceilings	Not established	440 ppm Ceiling (15 min); 1800 mg/m3 Ceiling (15 min)	Not established
Graphite (7782-42-5)	TWAs	2 mg/m3 TWA (all forms except graphite fibers, respirable fraction)	2.5 mg/m3 TWA (natural, respirable dust)	15 mg/m3 TWA (synthetic, total dust); 5 mg/m3 TWA (synthetic,

Exposure Limits Supplemental OSHA

•Graphite (7782-42-5): Mineral Dusts: (15 mppcf TWA (natural))

 $\bullet \textbf{Quartz (14808-60-7): \textbf{Mineral Dusts:} ((30)/(\%SiO2 + 2) \ mg/m3 \ TWA, \ total \ dust; \ (250)/(\%SiO2 + 5) \ mppcf \ TWA, \ respirable \ fraction; \ (10)/(\%SiO2 + 2) \ mg/m3 \ TWA, \ total \ dust; \ (250)/(\%SiO2 + 5) \ mppcf \ TWA, \ respirable \ fraction; \ (10)/(\%SiO2 + 2) \ mg/m3 \ TWA, \ total \ dust; \ (250)/(\%SiO2 + 5) \ mppcf \ TWA, \ respirable \ fraction; \ (10)/(\%SiO2 + 2) \ mg/m3 \ TWA, \ total \ dust; \ (250)/(\%SiO2 + 5) \ mppcf \ TWA, \ respirable \ fraction; \ (10)/(\%SiO2 + 2) \ mg/m3 \ TWA, \ total \ dust; \ (250)/(\%SiO2 + 5) \ mppcf \ TWA, \ respirable \ fraction; \ (10)/(\%SiO2 + 2) \ mg/m3 \ TWA, \ total \ dust; \ (250)/(\%SiO2 + 5) \ mppcf \ TWA, \ respirable \ fraction; \ (10)/(\%SiO2 + 2) \ mg/m3 \ TWA, \ total \ dust; \ (250)/(\%SiO2 + 5) \ mppcf \ TWA, \ respirable \ fraction; \ (10)/(\%SiO2 + 2) \ mg/m3 \ TWA, \ total \ dust; \ (250)/(\%SiO2 + 2) \ mg/m3 \ TWA, \ respirable \ fraction; \ (10)/(\%SiO2 + 2) \ mg/m3 \ TWA, \ respirable \ fraction; \ (10)/(\%SiO2 + 2) \ mg/m3 \ TWA, \ respirable \ fraction; \ (10)/(\%SiO2 + 2) \ mg/m3 \ TWA, \ respirable \ fraction; \ (10)/(\%SiO2 + 2) \ mg/m3 \ TWA, \ respirable \ fraction; \ (10)/(\%SiO2 + 2) \ mg/m3 \ TWA, \ respirable \ fraction; \ (10)/(\%SiO2 + 2) \ mg/m3 \ TWA, \ respirable \ fraction; \ (10)/(\%SiO2 + 2) \ mg/m3 \ TWA, \ respirable \ fraction; \ (10)/(\%SiO2 + 2) \ mg/m3 \ TWA, \ respirable \ fraction; \ (10)/(\%SiO2 + 2) \ mg/m3 \ TWA, \ respirable \ fraction; \ (10)/(\%SiO2 + 2) \ mg/m3 \ TWA, \ respirable \ fraction; \ (10)/(\%SiO2 + 2) \ mg/m3 \ TWA, \ respirable \ fraction; \ (10)/(\%SiO2 + 2) \ mg/m3 \ TWA, \ respirable \ fraction; \ (10)/(\%SiO2 + 2) \ mg/m3 \ TWA, \ respirable \ fraction; \ (10)/(\%SiO2 + 2) \ mg/m3 \ TWA, \ respirable \ fraction; \ (10)/(\%SiO2 + 2) \ mg/m3 \ TWA, \ respirable \ fraction; \ (10)/(\%SiO2 + 2) \ mg/m3 \ TWA, \ respirable \ fraction; \ (10)/(\%SiO2 + 2) \ mg/m3 \ TWA, \ respirable \ fraction; \ (10)/(\%SiO2 + 2) \ mg/m3 \ TWA, \ respirable \ fraction; \ (10)/(\%SiO2 + 2) \ mg/m3 \ TWA, \ respirable \ fraction;$

+ 2) mg/m3 TWA, respirable fraction)

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.

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.

Wear safety goggles.

Eye/Face Skin/Body

Wear protective clothing and 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 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 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	Aerosol	Appearance/Description	Aerosol with a solvent odor.
Color	Data lacking	Odor	Solvent
Odor Threshold	Data lacking		
General Properties	-	-	-
Boiling Point	Data lacking	Melting Point	Data lacking
Decomposition Temperature	Data lacking	рН	Data lacking
Specific Gravity/Relative Density	Data lacking	Water Solubility	Insoluble
Viscosity	Data lacking	Explosive Properties	Data lacking
Oxidizing Properties:	Data lacking		
Volatility	-	-	-
Vapor Pressure	Data lacking	Vapor Density	> 1 Air=1
Evaporation Rate	< 1 n-Butyl Acetate = 1		
Flammability	-	-	-
Flash Point	Data lacking	UEL	Data lacking
LEL	Data lacking	Autoignition	Data lacking
Flammability (solid, gas)	Data lacking		
Environmental	-	•	-
Octanol/Water Partition coefficient	Data lacking		

9.2 Other Information

1 No additional physical and chemical parameters noted.

Section 10: Stability and Reactivity

10.1 Reactivity

1 No dangerous reaction known under conditions of normal use.

10.2 Chemical stability

Stable

10.3 Possibility of hazardous reactions

1 Hazardous polymerization will not occur.

10.4 Conditions to avoid

Heat, sparks, open flames. Incompatible materials.

10.5 Incompatible materials

1 Strong oxidizing agents, acids, and alkalis.

10.6 Hazardous decomposition products

1 On burning may release carbon dioxide and carbon monoxide.

Section 11 - Toxicological Information

11.1 Information on toxicological effects

	Components				
Quartz (< 0.1%)	14808- 60-7	Multi-dose Toxicity: Inhalation-Hamster TCLo • 3 mg/m³ 6 Hour(s) 78 Week(s)-Intermittent; Lungs, Thorax, or Respiration:Fibrosis (interstitial); Lungs, Thorax, or Respiration:Changes in lung weight; Inhalation-Rat TCLo • 80 mg/m³ 26 Week(s)-Intermittent; Lungs, Thorax, or Respiration:Fibrosis, focal (pneumoconiosis); Blood:Changes in spleen; Immunological Including Allergic:Decrease in cellular immune response; Tumorigen / Carcinogen: Inhalation-Rat TCLo • 50 mg/m³ 6 Hour(s) 71 Week(s)-Intermittent; Tumorigenic:Carcinogenic by RTECS criteria; Liver:Tumors			
Heptane (5% TO 15%)	142-82- 5	Acute Toxicity: Inhalation-Rat LC50 • 103 g/m³ 4 Hour(s)			
Isobutane (1% TO 6%)	75-28- 5	Acute Toxicity: Inhalation-Rat LC50 • 57 pph 15 Minute(s); Behavioral:Tremor; Behavioral:Convulsions or effect on seizure threshold; Lungs, Thorax, or Respiration:Respiratory depression			

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 Data lacking OSHA HCS 2012 Data lacking
STOT-SE	EU/CLP • Data lacking OSHA HCS 2012 • Data lacking
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 • Data lacking OSHA HCS 2012 • Eye Irritation 2

Potential Health Effects

Inhalation

Acute (Immediate) I May cause irritation.

Chronic (Delayed) Repeated and prolonged inhalation may result in impaired lung function.

Skin

Acute (Immediate) I Causes skin irritation.

Chronic (Delayed) I No data available

Eye

Acute (Immediate) | Causes serious eye irritation.

Chronic (Delayed)

■ No data available

Ingestion

Acute (Immediate)

Under normal conditions of use, no health effects are expected.

Chronic (Delayed)

No data available

Carcinogenic Effects

1 This material contains Quartz which is considered a carcinogen, however this material as a whole is not classified as a carcinogen.

Carcinogenic Effects					
CAS IARC NTP					
Quartz	14808-60-7	Group 1-Carcinogenic	Known Human Carcinogen		

Key to abbreviations

LC = Lethal Concentration

LD = Lethal Dose

TC = Toxic Concentration

Section 12 - Ecological Information

12.1 Toxicity

This product contains a component that is potentially toxic to aquatic organisms and may have long lasting effects to the aquatic environment.

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

I 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

1 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	NDA	Consumer Commodity, ORM-D	NDA	NDA	NDA

Code

TDG	UN1950	AEROSOLS, FLAMMABLE	2.1	NDA	NDA
IMO/IMDG	UN1950	AEROSOLS, FLAMMABLE	2.1	NDA	NDA
IATA/ICAO	UN1950	Aerosols, flammable	2.1	NDA	NDA

14.6 Special precautions for user

■ No data available

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

■ No data available

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)

Inventory						
Component	CAS	Canada DSL	Canada NDSL	EU EINECS	EU ELNICS	
Graphite	7782-42-5	Yes	No	Yes	No	
Heptane	142-82-5	Yes	No	Yes	No	
Isobutane	75-28-5	Yes	No	Yes	No	
Propane	74-98-6	Yes	No	Yes	No	
Quartz	14808-60-7	Yes	No	Yes	No	

Canada

Isobutane	75-28-5	A, B1 (listed under Methyl-2 propane)
Heptane	142-82-5	B2, D2B
• Propane	74-98-6	A, B1
• Quartz	14808-60-7	D2A (In certain cases, this classification does not apply For more information, consumption the section Substance Specification Substance Specificatio
Graphite	7782-42-5	D2A (natural); D2B (synthe
Canada - WHMIS - Ingredient Disclosure List		
• Isobutane	75-28-5	Not Listed
Heptane	142-82-5	1 %
Propane	74-98-6	Not Listed
• Quartz	14808-60-7	1 %
Graphite	7782-42-5	Not Listed

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Canada - CEPA - Priority Substances List

• Isobutane 75-28-5 Not Listed

Heptane	142-82-5	Not Listed
Propane	74-98-6	Not Listed
Quartz	14808-60-7	Not Listed
Graphite	7782-42-5	Not Listed

Europe

EU - Hazardous Substances Restricted of Prohibito	ed in Electrical Equipment (2011/65/EU) (RoHS)	
Isobutane	75-28-5	Not Listed
Heptane	142-82-5	Not Listed
Propane	74-98-6	Not Listed
Quartz	14808-60-7	Not Listed
Graphite	7782-42-5	Not Listed

Japan

Environment Inventory - Japan - Industrial Safety and Health Law Substance	es (ISHL)	
Isobutane	75-28-5	Not Listed
Heptane	142-82-5	Not Listed
Propane	74-98-6	Not Listed
Quartz	14808-60-7	Not Listed
Graphite	7782-42-5	Not Listed

Other		
Japan - Chemical Substance Control Law (CSCI	L) - Monitoring Chemical Substances	
Isobutane	75-28-5 Not Listed	
Heptane	142-82-5 Not Listed	
Propane	74-98-6 Not Listed	
Quartz	14808-60-7 Not Listed	
Graphite	7782-42-5 Not Listed	
Japan - Poisonous and Deleterious Substances	s - Substances Not Considered Deleterious	
Isobutane	75-28-5 Not Listed	
Heptane	142-82-5 Not Listed	
• Propane	74-98-6 Not Listed	
Quartz	14808-60-7 Not Listed	
Graphite	7782-42-5 Not Listed	
Japan - Poisonous and Deleterious Substances	s - Substances Not Considered Poisonous	
• Isobutane	75-28-5 Not Listed	
Heptane	142-82-5 Not Listed	
• Propane	74-98-6 Not Listed	
Quartz	14808-60-7 Not Listed	
Graphite	7782-42-5 Not Listed	

United States

Labor U.S OSHA - Process Safety Management - Highly Hazardous	Chomicals		
• Isobutane	75-28-5	Not Listed	
Heptane	142-82-5	Not Listed	
Propane	74-98-6	Not Listed	
Quartz	14808-60-7	Not Listed	
Quartz	14000-00-7	NOT LISTED	

Graphite	7782-42-5	Not Listed
U.S OSHA - Specifically Regulated Chemicals		
Isobutane	75-28-5	Not Listed
Heptane	142-82-5	Not Listed
• Propane	74-98-6	Not Listed
• Quartz	14808-60-7	Not Listed
Graphite	7782-42-5	Not Listed
- Graphine	1102-42-3	Not Listed
Environment		
U.S CAA (Clean Air Act) - 1990 Hazardous Air Pollutants		
• Isobutane	75-28-5	Not Listed
Heptane	142-82-5	Not Listed
Propane	74-98-6	Not Listed
• Quartz	14808-60-7	Not Listed
Graphite	7782-42-5	Not Listed
U.S CERCLA/SARA - Hazardous Substances and their Reportable Quantities • Isobutane	75-28-5	Not Listed
Heptane Regress	142-82-5	Not Listed
• Propane	74-98-6	Not Listed
• Quartz	14808-60-7	Not Listed
Graphite	7782-42-5	Not Listed
U.S CERCLA/SARA - Radionuclides and Their Reportable Quantities		
• Isobutane	75-28-5	Not Listed
Heptane	142-82-5	Not Listed
Propane	74-98-6	Not Listed
• Quartz	14808-60-7	Not Listed
Graphite	7782-42-5	Not Listed
U.S CERCLA/SARA - Section 302 Extremely Hazardous Substances EPCRA RQs		
Isobutane	75-28-5	Not Listed
Heptane	142-82-5	Not Listed
Propane	74-98-6	Not Listed
• Quartz	14808-60-7	Not Listed
Graphite	7782-42-5	Not Listed
U.S CERCLA/SARA - Section 302 Extremely Hazardous Substances TPQs		
• Isobutane	75-28-5	Not Listed
Heptane	142-82-5	Not Listed
Propane	74-98-6	Not Listed
• Quartz	14808-60-7	Not Listed
Graphite	7782-42-5	Not Listed
Copino	1102 72-0	. Tot Liotou
U.S CERCLA/SARA - Section 313 - Emission Reporting		
Isobutane	75-28-5	Not Listed
Heptane	142-82-5	Not Listed
Propane	74-98-6	Not Listed
Quartz	14808-60-7	Not Listed
Graphite	7782-42-5	Not Listed
U.S CERCLA/SARA - Section 313 - PBT Chemical Listing	75 20 E	Not Listed
Isobutane	75-28-5	Not Listed

Heptane	142-82-5 Not Listed
Propane	74-98-6 Not Listed
Quartz	14808-60-7 Not Listed
Graphite	7782-42-5 Not Listed

United States - California

U.S California - Proposition 65 - Carcinogens List		
• Isobutane	75-28-5	Not Listed
Heptane	142-82-5	Not Listed
Propane	74-98-6	Not Listed
• Quartz	14808-60-7	carcinogen, initial date 10/1/8 (airborne particles of respirable size)
Graphite	7782-42-5	Not Listed
U.S California - Proposition 65 - Developmental Toxicity		
• Isobutane	75-28-5	Not Listed
Heptane	142-82-5	Not Listed
• Propane	74-98-6	Not Listed
• Quartz	14808-60-7	Not Listed
Graphite	7782-42-5	Not Listed
U.S California - Proposition 65 - Maximum Allowable Dose Levels (MADL)		
• Isobutane	75-28-5	Not Listed
Heptane	142-82-5	Not Listed
Propane	74-98-6	Not Listed
• Quartz	14808-60-7	Not Listed
Graphite	7782-42-5	Not Listed
U.S California - Proposition 65 - No Significant Risk Levels (NSRL)		
• Isobutane	75-28-5	Not Listed
Heptane	142-82-5	Not Listed
• Propane	74-98-6	Not Listed
• Quartz	14808-60-7	Not Listed
Graphite	7782-42-5	Not Listed
U.S California - Proposition 65 - Reproductive Toxicity - Female		
• Isobutane	75-28-5	Not Listed
Heptane	142-82-5	Not Listed
• Propane	74-98-6	Not Listed
• Quartz	14808-60-7	Not Listed
• Graphite	7782-42-5	Not Listed
U.S California - Proposition 65 - Reproductive Toxicity - Male		
• Isobutane	75-28-5	Not Listed
Heptane	142-82-5	Not Listed
• Propane	74-98-6	Not Listed
• Quartz	14808-60-7	Not Listed
• Graphite	7782-42-5	Not Listed

15.2 Chemical Safety Assessment

 $_{\rm I}$ No Chemical Safety Assessment has been carried out.

15.3 Other Information

WARNING: This product contains a chemical known to the State of California to cause cancer.

Section 16 - Other Information

Relevant Phrases (code & full text)

1 H220 - Extremely flammable gas

H225 - Highly flammable liquid and vapour

H280 - Contains gas under pressure; may explode if heated

H304 - May be fatal if swallowed and enters airways

H336 - May cause drowsiness or dizziness

H400 - Very toxic to aquatic life

H410 - Very toxic to aquatic life with long lasting effects

R11 - Highly flammable. R38 - Irritating to skin.

R50 - Very toxic to aquatic organisms.

R65 - Harmful: may cause lung damage if swallowed. R67 - Vapours may cause drowsiness and dizziness.

No data available

■ No data available

Preparation Date
Disclaimer/Statement of
Liability

Last Revision Date

I The information contained herein is based on data available. However, no warranty is expressed or implied regarding the accuracy of the data or the results obtained from the use thereof. Because the information contained herein may be applied under conditions beyond our control, we assume no responsibility for its use.

Key to abbreviations NDA = No data available