

ITEM# 98-025-1

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

- 1.1 Product identifier** ITEM# 98-025-1
- Product Name** ■ GRAPHITE MOLD RELEASE SPRAY PLUS
- 1.2 Relevant identified uses of the substance or mixture and uses advised against**
- Relevant identified use(s)** ■ Dry film lubricant
- 1.3 Details of the supplier of the safety data sheet**
- ROMANOFF INTERNATIONAL SUPPLY CORPORATION
9 DEFOREST STREET
AMITYVILLE, NY 11701 US
TEL: 631-842-2400
- 1.4 Emergency telephone number** CHEM TEL, ACCOUNT# MIS4594445
- United States, Canada, Puerto Rico & U.S. Virgin Islands: 1-800-255-3924
Australia: 1-300-954-583, Brasil: 0-800-591-6042, China: 400-120-0751,
India: 000-800-100-4086, Mexico: 800-099-0731
ALL OTHER COUNTRIES: 1-813-248-0585

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 1 - H222
 - Eye Irritation 2 - H319
 - Specific Target Organ Toxicity Single Exposure 3: Narcotic Effects - H336
 - EUH066
- DSD/DPD**
- Extremely Flammable (F+)
 - Irritant (Xi)
 - R12, R36, R66, R67

2.2 Label Elements

CLP

DANGER



Hazard statements ■ H222 - Extremely flammable aerosol

H319 - Causes serious eye irritation
 H336 - May cause drowsiness or dizziness
 EUH066 - Repeated exposure may cause skin dryness or cracking.

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 mist/vapours/spray.
 - P264 - Wash thoroughly after handling.
 - P271 - Use only outdoors or in a well-ventilated area.
 - P280 - Wear 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.
 - 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.
- Storage/Disposal**
- P403+P233 - Store in a well-ventilated place. Keep container tightly closed.
 - P410+P412 - Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.
 - P405 - Store locked up.
 - P501 - Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

DSD/DPD



- Risk phrases**
- R12 - Extremely flammable.
 - R36 - Irritating to eyes.
 - R66 - Repeated exposure may cause skin dryness or cracking.
 - 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 1 - H222
 - Eye Irritation 2 - H319
 - Specific Target Organ Toxicity Single Exposure 3: Narcotic Effects - H336
 - Germ Cell Mutagenicity 1B - H340
 - Reproductive Toxicity 2 - H361
 - Specific Target Organ Toxicity Repeated Exposure 1 - H372
 - Specific Target Organ Toxicity Repeated Exposure 2 - H373

2.2 Label elements

OSHA HCS 2012

DANGER



Hazard statements ■ Extremely flammable aerosol - H222
 Causes serious eye irritation - H319
 May cause drowsiness or dizziness - H336
 May cause genetic defects. - H340
 Suspected of damaging fertility or the unborn child. - H361
 Causes damage to organs - Central Nervous System (CNS) through prolonged or repeated exposure via Inhalation - H372
 May cause damage to organs - Lungs through prolonged or repeated exposure via Inhalation - H373

Precautionary statements

- Prevention** ■ Obtain special instructions before use. - P201
 Do not handle until all safety precautions have been read and understood. - P202
 Keep away from heat, sparks, open flames and/or hot surfaces. - No smoking. - P210
 Do not spray on an open flame or other ignition source. - P211
 Pressurized container: Do not pierce or burn, even after use. - P251
 Do not breathe mist/vapours/spray. - P260
 Wash thoroughly after handling. - P264
 Do not eat, drink or smoke when using this product. - P270
 Use only outdoors or in a well-ventilated area. - P271
 Wear protective gloves/protective clothing/eye protection/face protection. - P280
- Response** ■ IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. - P304+P340
 Call a POISON CENTER or doctor/physician if you feel unwell. - P312
 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. - P305+P351+P338
 If eye irritation persists: Get medical advice/attention. - P337+P313
 IF exposed or concerned: Get medical advice/attention. - P308+P313
 Get medical advice/attention if you feel unwell. - P314
- Storage/Disposal** ■ Store in a well-ventilated place. Keep container tightly closed. - P403+P233
 Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F. - P410+P412
 Store locked up. - P405
 Dispose of content and/or container in accordance with local, regional, national, and/or international regulations. - P501

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
 Other Toxic Effects - D2B

2.2 Label elements

WHMIS



- Flammable Aerosols - B5
 Other Toxic Effects - D2A
 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
Acetone	CAS:67-64-1 EC Number:200-662-2 EU Index:606-001-00-8	< 45%	Inhalation-Rat LC50 • 50100 mg/m ³ 8 Hour(s) Ingestion/Oral-Rat LD50 • 5800 mg/kg	EU DSD/DPD: Annex VI, Table 3.2: F R11 Xi R36 R66 R67 EU CLP: Annex VI, Table 3.1: Flam. Liq. 2, H226; Eye Irrit. 2, H319; STOT SE 3: Narc., H336; EUH066 OSHA HCS 2012: Flam. Liq. 2; Eye Irrit. 2; STOT SE 3: Narc.	NDA
Naphtha (petroleum), hydrotreated light	CAS:64742-49-0 EC Number:265-151-9 EU Index:649-328-00-1	10% TO 30%	NDA	EU DSD/DPD: Annex VI, Table 3.2: Carc.Cat.2; R45 Muta.Cat.2; R46 Xn; R65 EU CLP: Annex VI, Table 3.1: Carc. 1B, H350; Muta. 1B, H340; Asp. Tox. 1, H304 OSHA HCS 2012: Not Classified	Contains <0.1% benzene therefore carcinogen and mutagen classifications does not apply.
Graphite	CAS:7782-42-5 EC Number:231-955-3	10% TO 25%	NDA	EU DSD/DPD: Self Classified: Xn R48/20 EU CLP: Self Classified: STOT RE 2 (Lungs, Inhl), H373 OSHA HCS 2012: STOT RE 2 (Lungs, Inhl); Comb. Dust	NDA
Propane	CAS:74-98-6 EC Number:200-827-9 EU Index:601-003-00-5	< 25%	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
Toluene	CAS:108-88-3 EC Number:203-625-9 EU Index:601-021-00-3	2.4%	Ingestion/Oral-Rat LD50 • 636 mg/kg Inhalation-Rat LC50 • 49 g/m ³ 4 Hour(s) Skin-Rabbit LD50 • 14100 µL/kg	EU DSD/DPD: Annex VI, Table 3.2: F R11 Xi R38 Xn R48/20-65 Repr.Cat.3 R63 R67 EU CLP: Annex VI, Table 3.1: Flam. Liq. 2, H225; Skin Irrit. 2, H315; Repr. 2, H361d; STOT SE 3: Narc., H336; STOT RE 2, H373; Asp. Tox. 1, H304 OSHA HCS 2012: Flam. Liq. 2; Acute Tox. 4 (oral); Skin Irrit. 2; Eye Irrit. 2; Muta. 1B; Repr. 2; STOT SE 3: Narc.; STOT RE 1 (CNS, Inhl); Asp. Tox. 1	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
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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, DO NOT 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 Media

- No data available

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

- Do not touch or walk through spilled material. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate enclosed areas.

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 and sewers.

6.3 Methods and material for containment and cleaning up

Containment/Clean-up Measures

- Clean up area with absorbent material and place in closed containers for disposal.

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

	Result	Exposure Limits/Guidelines			
		ACGIH	Europe	NIOSH	OSHA
Quartz (14808-60-7)	TWAs	0.025 mg/m3 TWA (respirable fraction)	Not established	0.05 mg/m3 TWA (respirable dust)	Not established
	STELs	Not established	100 ppm STEL; 384 mg/m3 STEL	150 ppm STEL; 560 mg/m3 STEL	Not established
Toluene (108-88-3)	TWAs	20 ppm TWA	50 ppm TWA; 192 mg/m3 TWA	100 ppm TWA; 375 mg/m3 TWA	200 ppm TWA

Graphite as Particulates not otherwise classified (PNOC)	TWAs	2 mg/m3 TWA (all forms except graphite fibers, respirable fraction)	Not established	2.5 mg/m3 TWA (natural, respirable dust)	15 mg/m3 TWA (synthetic, total dust); 5 mg/m3 TWA (synthetic, respirable fraction)
Propane (74-98-6)	TWAs	1000 ppm TWA (listed under Aliphatic hydrocarbon gases: Alkane C1-4)	Not established	1000 ppm TWA; 1800 mg/m3 TWA	1000 ppm TWA; 1800 mg/m3 TWA
Acetone (67-64-1)	TWAs	500 ppm TWA	Not established	250 ppm TWA; 590 mg/m3 TWA	1000 ppm TWA; 2400 mg/m3 TWA
	STELs	750 ppm STEL	Not established	Not established	Not established

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.

Eye/Face

- Wear safety goggles.

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.

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	pH	Not relevant
Specific Gravity/Relative Density	Data lacking	Water Solubility	Slightly Soluble
Viscosity	Data lacking	Explosive Properties	Data lacking
Oxidizing Properties:	Data lacking		
Volatility			
Vapor Pressure	Data lacking	Vapor Density	Data lacking
Evaporation Rate	Data lacking		
Flammability			
Flash Point	Not relevant	UEL	Not relevant
LEL	Not relevant	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

10.3 Possibility of hazardous reactions

- Hazardous polymerization will not occur.

10.4 Conditions to avoid

- Heat, sparks, open flames. Incompatible materials.

10.5 Incompatible materials

- Strong oxidizing agents, acids, and alkalis.

10.6 Hazardous decomposition products

- 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/m ³ 6 Hour(s) 78 Week(s)-Intermittent; <i>Lungs, Thorax, or Respiration:</i> Fibrosis (interstitial); Lungs, Thorax, or Respiration:Changes in lung weight; Inhalation-Rat TCLo • 80 mg/m ³ 26 Week(s)-Intermittent; <i>Lungs, Thorax, or Respiration:</i> Fibrosis, focal (pneumoconiosis); Blood:Changes in spleen; Immunological Including Allergic:Decrease in cellular immune response; Tumorigen / Carcinogen: Inhalation-Rat TCLo • 50 mg/m ³ 6 Hour(s) 71 Week(s)-Intermittent; <i>Tumorigenic:</i> Carcinogenic by RTECS criteria; Liver:Tumors
Toluene (2.4%)	108-88-3	Acute Toxicity: Ingestion/Oral-Rat LD50 • 636 mg/kg; Inhalation-Rat LC50 • 49 g/m ³ 4 Hour(s); Inhalation-Human TCLo • 1500 mg/m ³ 8 Hour(s); <i>Sense Organs and Special Senses:</i> Eye:Lacrimation; Sense Organs and Special Senses:Eye:Conjunctive irritation; Behavioral:Ataxia; Inhalation-Human TCLo • 200 ppm; <i>Brain and Coverings:</i> Recordings from specific areas of CNS; Behavioral:Antipsychotic; Blood:Changes in bone marrow not included above; Inhalation-Man TCLo • 50 ppm; <i>Kidney, Ureter, and Bladder:</i> Other changes in urine composition; Skin-Rabbit LD50 • 14100 µL/kg; Irritation: Eye-Rabbit • 2 mg 24 Hour(s) • Severe irritation; Skin-Rabbit • 20 mg 24 Hour(s) • Moderate irritation; Multi-dose Toxicity: Inhalation-Mouse TCLo • 250 ppm 4 Day(s)-Continuous; <i>Behavioral:</i> Convulsions or effect on seizure threshold; Behavioral:Abuse; Inhalation-Mouse TCLo • 50 ppm 12 Week(s)-Intermittent; <i>Brain and Coverings:</i> Other degenerative changes; Inhalation-Rat TCLo • 10 ppm 6 Hour(s) 13 Week(s)-Intermittent; <i>Brain and Coverings:</i> Other degenerative changes; Biochemical:Enzyme inhibition, induction, or change in blood or tissue levels:Multiple enzyme effects; Mutagen: Micronucleus test • Ingestion/Oral-Mouse • 200 mg/kg; Sister chromatid exchange • Inhalation-Human • 252 µg/L 19 Year(s); Cytogenetic analysis • Inhalation-Rat • 5400 µg/m ³ 16 Week(s)-Intermittent; Reproductive: Inhalation-Mouse TCLo • 500 mg/m ³ 24 Hour(s)(6-13D preg); <i>Reproductive Effects:</i> Effects on Embryo or Fetus:Fetotoxicity (except death, e.g., stunted fetus); Inhalation-Mouse TCLo • 200 ppm 7 Hour(s)(7-16D preg); <i>Reproductive Effects:</i> Specific Developmental Abnormalities:Urogenital system

Acetone ($< 45\%$)	67-64-1	Acute Toxicity: Ingestion/Oral-Rat LD50 • 5800 mg/kg; Inhalation-Rat LC50 • 50100 mg/m ³ ; Irritation: Eye-Rabbit • 20 mg • Severe irritation; Skin-Rabbit • 395 mg-Open • Mild irritation; Reproductive: Inhalation-Rat TCLO • 11000 ppm (6-19D preg); <i>Reproductive Effects: Specific Developmental Abnormalities: Other developmental abnormalities</i>
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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 • Germ Cell Mutagenicity 1B
Skin corrosion/Irritation	EU/CLP • Data lacking OSHA HCS 2012 • Data lacking
Skin sensitization	EU/CLP • Data lacking OSHA HCS 2012 • Data lacking
STOT-RE	EU/CLP • Data lacking OSHA HCS 2012 • Specific Target Organ Toxicity Repeated Exposure 1; Specific Target Organ Toxicity Repeated Exposure 2
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 • Eye Irritation 2 OSHA HCS 2012 • Eye Irritation 2

Potential Health Effects

Inhalation

Acute (Immediate)

- May affect the central nervous system. Symptoms may include dizziness, drowsiness, lethargy, coma and death.

Chronic (Delayed)

- Repeated and prolonged inhalation may result in impaired lung function. Repeated or prolonged exposure may cause hyperactive reflexes, peripheral neuropathy, ataxia, personality changes, tremors, headaches, emotional liability, cognitive dysfunction and memory loss. Toluene abuse or sniffing may cause liver, kidney and central nervous system damage. Toluene may also cause sensitization to epinephrine or other adrenalin like agents.

Skin

Acute (Immediate)

- May cause mild irritation.

Chronic (Delayed)

- Contact may dry the skin prolonged contact may cause irritation. Solvent action can dry and defate the skin causing skin to crack, leading to dermatitis.

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
- Mutagenic Effects** ■ Repeated and prolonged exposure may cause mutagenic effects.

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

- Reproductive Effects** ■ Repeated and prolonged exposure may affect the reproductive system.

Key to abbreviations

LC = Lethal Concentration

LD = Lethal Dose

TC = Toxic Concentration

Section 12 - Ecological Information

12.1 Toxicity

- 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	NDA	Consumer Commodity, ORM-D	NDA	NDA	NDA
TDG	NDA	CONSUMER COMMODITY, ORM-D	NDA	NDA	NDA
IMO/IMDG	UN1950	AEROSOLS, FLAMMABLE	2.1	NDA	NDA

IATA/ICAO	UN1950	Aerosols, flammable	2.1	NDA	NDA
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14.6 Special precautions for user ■ None specified.

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

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
Acetone	67-64-1	Yes	No	Yes	No
Graphite	7782-42-5	Yes	No	Yes	No
Naphtha (petroleum), hydrotreated light	64742-49-0	Yes	No	Yes	No
Propane	74-98-6	Yes	No	Yes	No
Quartz	14808-60-7	Yes	No	Yes	No
Toluene	108-88-3	Yes	No	Yes	No

Canada

Labor

Canada - WHMIS - Classifications of Substances

• Naphtha (petroleum), hydrotreated light	64742-49-0	Not Listed
• Acetone	67-64-1	B2, D2B
• Propane	74-98-6	A, B1
• Toluene	108-88-3	B2, D2A, D2B
• Quartz	14808-60-7	D2A (In certain cases, this classification does not apply. For more information, consult the section Substance Specific Issues - Silica, crystalline, encapsulated on Health Canada's WHMIS Division website.)
• Graphite	7782-42-5	D2A (natural); D2B (synthetic)
• Graphite as Particulates not otherwise classified (PNOC)		Not Listed

Canada - WHMIS - Ingredient Disclosure List

• Naphtha (petroleum), hydrotreated light	64742-49-0	Not Listed
• Acetone	67-64-1	1 %
• Propane	74-98-6	Not Listed
• Toluene	108-88-3	1 %
• Quartz	14808-60-7	1 %
• Graphite	7782-42-5	Not Listed
• Graphite as Particulates not otherwise classified (PNOC)		Not Listed

Environment

Canada - CEPA - Priority Substances List

• Naphtha (petroleum), hydrotreated light	64742-49-0	Not Listed
• Acetone	67-64-1	Not Listed
• Propane	74-98-6	Not Listed
• Toluene	108-88-3	Priority Substance List 1 (substance not considered toxic)
• Quartz	14808-60-7	Not Listed
• Graphite	7782-42-5	Not Listed
• Graphite as Particulates not otherwise classified (PNOC)		Not Listed

Europe

Other

EU - Hazardous Substances Restricted or Prohibited in Electrical Equipment (2011/65/EU) (RoHS)

• Naphtha (petroleum), hydrotreated light	64742-49-0	Not Listed
• Acetone	67-64-1	Not Listed
• Propane	74-98-6	Not Listed
• Toluene	108-88-3	Not Listed
• Quartz	14808-60-7	Not Listed
• Graphite	7782-42-5	Not Listed
• Graphite as Particulates not otherwise classified (PNOC)		Not Listed

United States

Labor

U.S. - OSHA - Process Safety Management - Highly Hazardous Chemicals

• Naphtha (petroleum), hydrotreated light	64742-49-0	Not Listed
• Acetone	67-64-1	Not Listed
• Propane	74-98-6	Not Listed
• Toluene	108-88-3	Not Listed
• Quartz	14808-60-7	Not Listed
• Graphite	7782-42-5	Not Listed
• Graphite as Particulates not otherwise classified (PNOC)		Not Listed

U.S. - OSHA - Specifically Regulated Chemicals

• Naphtha (petroleum), hydrotreated light	64742-49-0	Not Listed
• Acetone	67-64-1	Not Listed
• Propane	74-98-6	Not Listed
• Toluene	108-88-3	Not Listed
• Quartz	14808-60-7	Not Listed
• Graphite	7782-42-5	Not Listed
• Graphite as Particulates not otherwise classified (PNOC)		Not Listed

Environment

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

• Naphtha (petroleum), hydrotreated light	64742-49-0	Not Listed
• Acetone	67-64-1	Not Listed
• Propane	74-98-6	Not Listed
• Toluene	108-88-3	
• Quartz	14808-60-7	Not Listed
• Graphite	7782-42-5	Not Listed
• Graphite as Particulates not otherwise classified (PNOC)		Not Listed

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

• Naphtha (petroleum), hydrotreated light	64742-49-0	Not Listed
• Acetone	67-64-1	5000 lb final RQ; 2270 kg final RQ
• Propane	74-98-6	Not Listed
• Toluene	108-88-3	1000 lb final RQ; 454 kg final RQ
• Quartz	14808-60-7	Not Listed
• Graphite	7782-42-5	Not Listed
• Graphite as Particulates not otherwise classified (PNOC)		Not Listed

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

• Naphtha (petroleum), hydrotreated light	64742-49-0	Not Listed
• Acetone	67-64-1	Not Listed
• Propane	74-98-6	Not Listed
• Toluene	108-88-3	Not Listed
• Quartz	14808-60-7	Not Listed
• Graphite	7782-42-5	Not Listed
• Graphite as Particulates not otherwise classified (PNOC)		Not Listed

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

• Naphtha (petroleum), hydrotreated light	64742-49-0	Not Listed
• Acetone	67-64-1	Not Listed
• Propane	74-98-6	Not Listed
• Toluene	108-88-3	Not Listed
• Quartz	14808-60-7	Not Listed
• Graphite	7782-42-5	Not Listed
• Graphite as Particulates not otherwise classified (PNOC)		Not Listed

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

• Naphtha (petroleum), hydrotreated light	64742-49-0	Not Listed
• Acetone	67-64-1	Not Listed
• Propane	74-98-6	Not Listed
• Toluene	108-88-3	Not Listed
• Quartz	14808-60-7	Not Listed
• Graphite	7782-42-5	Not Listed
• Graphite as Particulates not otherwise classified (PNOC)		Not Listed

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

• Naphtha (petroleum), hydrotreated light	64742-49-0	Not Listed
• Acetone	67-64-1	Not Listed
• Propane	74-98-6	Not Listed
• Toluene	108-88-3	1.0 % de minimis concentration
• Quartz	14808-60-7	Not Listed
• Graphite	7782-42-5	Not Listed
• Graphite as Particulates not otherwise classified (PNOC)		Not Listed

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

• Naphtha (petroleum), hydrotreated light	64742-49-0	Not Listed
• Acetone	67-64-1	Not Listed
• Propane	74-98-6	Not Listed
• Toluene	108-88-3	Not Listed
• Quartz	14808-60-7	Not Listed

• Graphite	7782-42-5	Not Listed
• Graphite as Particulates not otherwise classified (PNOC)		Not Listed

United States - California

Environment

U.S. - California - Proposition 65 - Carcinogens List

• Naphtha (petroleum), hydrotreated light	64742-49-0	Not Listed
• Acetone	67-64-1	Not Listed
• Propane	74-98-6	Not Listed
• Toluene	108-88-3	Not Listed
• Quartz	14808-60-7	carcinogen, initial date 10/1/88 (airborne particles of respirable size)
• Graphite	7782-42-5	Not Listed
• Graphite as Particulates not otherwise classified (PNOC)		Not Listed

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

• Naphtha (petroleum), hydrotreated light	64742-49-0	Not Listed
• Acetone	67-64-1	Not Listed
• Propane	74-98-6	Not Listed
• Toluene	108-88-3	developmental toxicity, initial date 1/1/91
• Quartz	14808-60-7	Not Listed
• Graphite	7782-42-5	Not Listed
• Graphite as Particulates not otherwise classified (PNOC)		Not Listed

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

• Naphtha (petroleum), hydrotreated light	64742-49-0	Not Listed
• Acetone	67-64-1	Not Listed
• Propane	74-98-6	Not Listed
• Toluene	108-88-3	7000 µg/day MADL (level represents absorbed dose)
• Quartz	14808-60-7	Not Listed
• Graphite	7782-42-5	Not Listed
• Graphite as Particulates not otherwise classified (PNOC)		Not Listed

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

• Naphtha (petroleum), hydrotreated light	64742-49-0	Not Listed
• Acetone	67-64-1	Not Listed
• Propane	74-98-6	Not Listed
• Toluene	108-88-3	Not Listed
• Quartz	14808-60-7	Not Listed
• Graphite	7782-42-5	Not Listed
• Graphite as Particulates not otherwise classified (PNOC)		Not Listed

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

• Naphtha (petroleum), hydrotreated light	64742-49-0	Not Listed
• Acetone	67-64-1	Not Listed
• Propane	74-98-6	Not Listed
• Toluene	108-88-3	female reproductive toxicity, initial date 8/7/09
• Quartz	14808-60-7	Not Listed
• Graphite	7782-42-5	Not Listed
• Graphite as Particulates not otherwise classified (PNOC)		Not Listed

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

• Naphtha (petroleum), hydrotreated light	64742-49-0	Not Listed
• Acetone	67-64-1	Not Listed
• Propane	74-98-6	Not Listed
• Toluene	108-88-3	Not Listed
• Quartz	14808-60-7	Not Listed
• Graphite	7782-42-5	Not Listed
• Graphite as Particulates not otherwise classified (PNOC)		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
- H225 - Highly flammable liquid and vapour
- H226 - Flammable liquid and vapour
- H280 - Contains gas under pressure; may explode if heated
- H304 - May be fatal if swallowed and enters airways
- H315 - Causes skin irritation
- H340 - May cause genetic defects.
- H350 - May cause cancer.
- H361d - Suspected of damaging the unborn child.
- H373 - May cause damage to organs through prolonged or repeated exposure.
- R11 - Highly flammable.
- R38 - Irritating to skin.
- R45 - May cause cancer.
- R46 - May cause heritable genetic damage.
- R48/20 - Harmful: danger of serious damage to health by prolonged exposure through inhalation.
- R63 - Possible risk of harm to the unborn child.
- R65 - Harmful: may cause lung damage if swallowed.

Last Revision Date

- 06/23/17

Preparation Date

- 12/September/2014

Disclaimer/Statement of Liability

- 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