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

1.1 Product identifier

Product Name  ●  SLIP Plate Aerosol

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

Manufacturer  ●  Superior Graphite

10 S. Riverside Plaza
Chicago, IL 60606
United States

Telephone (General)  ●  312-559-2999 - (8-5 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  ●  +1 703-527-3887 - Outside USA and Canada (collect calls accepted)

Section 2: Hazards Identification

EU/EEC
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
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
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

OSHA HCS 2012

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

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Identifiers</th>
<th>%</th>
<th>LD50/LC50</th>
<th>Classifications According to Regulation/Directive</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acetone</td>
<td>CAS: 67-64-1</td>
<td>&lt;45%</td>
<td>Inhalation-Rat LC50 • 50100 mg/m³ 8 Hour(s)</td>
<td>EU DSD/DPD: Annex VI, Table 3.2: F R11 Xi R36 R66 R67</td>
<td>NDA</td>
</tr>
<tr>
<td>Naphtha (petroleum), hydrotreated light</td>
<td>CAS: 64742-49-0</td>
<td>10% TO 30%</td>
<td>Inhalation-Rat LC50 • 49 g/m³ 4 Hour(s)</td>
<td>EU DSD/DPD: Annex VI, Table 3.2: Flam. Liq. 2, H226; Eye Irrit. 2, H319; STOT SE 3: Narc., H336; EUH066</td>
<td>Contains &lt;0.1% benzene therefore carcinogen and mutagen classifications does not apply.</td>
</tr>
<tr>
<td>Graphite</td>
<td>CAS: 7782-42-5</td>
<td>10% TO 25%</td>
<td>NDA</td>
<td>EU DSD/DPD: Self Classified: Xn R48/20</td>
<td>NDA</td>
</tr>
<tr>
<td>Toluene</td>
<td>CAS: 108-88-3</td>
<td>2.4%</td>
<td>Ingestion/Oral-Rat LD50 • 636 mg/kg; Inhalation-Rat LC50 • 49 g/m³ 4 Hour(s); Skin-Rabbit LD50 • 14100 µL/kg</td>
<td>EU DSD/DPD: Annex VI, Table 3.2: Flam. Liq. 2, Acute Tox. 4 (oral); Skin Irrit. 2; Eye Irrit. 2; Mut. 1B; Repr. 2; STOT SE 3: Narc.; STOT RE 1 (CNS, Inhl); Asp. Tox. 1</td>
<td>NDA</td>
</tr>
</tbody>
</table>
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 >120º 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

<table>
<thead>
<tr>
<th>Exposure Limits/Guidelines</th>
<th>Result</th>
<th>ACGIH</th>
<th>Europe</th>
<th>NIOSH</th>
<th>OSHA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quartz (14808-60-7)</td>
<td>TWAs</td>
<td>0.025 mg/m³ TWA (respirable fraction)</td>
<td>Not established</td>
<td>0.05 mg/m³ TWA (respirable dust)</td>
<td>Not established</td>
</tr>
<tr>
<td>Toluene (108-88-3)</td>
<td>STELs</td>
<td>Not established</td>
<td>100 ppm STEL; 384 mg/m³ STEL</td>
<td>150 ppm STEL; 560 mg/m³ STEL</td>
<td>Not established</td>
</tr>
<tr>
<td></td>
<td>TWAs</td>
<td>20 ppm TWA</td>
<td>50 ppm TWA; 192 mg/m³ TWA</td>
<td>100 ppm TWA; 375 mg/m³ TWA</td>
<td>200 ppm TWA</td>
</tr>
<tr>
<td></td>
<td>Ceilings</td>
<td>Not established</td>
<td>Not established</td>
<td>Not established</td>
<td>300 ppm Ceiling</td>
</tr>
</tbody>
</table>
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 | Not established |
| STELs | 750 ppm STEL | Not established | 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

### Section 9 - Physical and Chemical Properties

#### 9.1 Information on Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Material Description</th>
<th>Physical Form</th>
<th>Aerosol</th>
<th>Appearance/Description</th>
<th>Aerosol with a solvent odor.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Color</td>
<td>Data lacking</td>
<td>Data lacking</td>
<td>Data lacking</td>
<td></td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>Data lacking</td>
<td>Data lacking</td>
<td>Data lacking</td>
<td></td>
</tr>
</tbody>
</table>

#### General Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Physical Form</th>
<th>Appearance/Description</th>
<th>Explosive Properties</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boiling Point</td>
<td>Data lacking</td>
<td>Melting Point</td>
<td>Data lacking</td>
</tr>
<tr>
<td>Decomposition Temperature</td>
<td>Data lacking</td>
<td>pH</td>
<td>Not relevant</td>
</tr>
<tr>
<td>Specific Gravity/Relative Density</td>
<td>Data lacking</td>
<td>Water Solubility</td>
<td>Slightly Soluble</td>
</tr>
<tr>
<td>Viscosity</td>
<td>Data lacking</td>
<td>Explosive Properties</td>
<td>Data lacking</td>
</tr>
</tbody>
</table>

#### Volatility

<table>
<thead>
<tr>
<th>Property</th>
<th>Physical Form</th>
<th>Appearance/Description</th>
<th>Explosive Properties</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vapor Pressure</td>
<td>Data lacking</td>
<td>Vapor Density</td>
<td>Data lacking</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>Data lacking</td>
<td>Data lacking</td>
<td>Data lacking</td>
</tr>
</tbody>
</table>

#### Flammability

<table>
<thead>
<tr>
<th>Property</th>
<th>Physical Form</th>
<th>Appearance/Description</th>
<th>Explosive Properties</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flash Point</td>
<td>Not relevant</td>
<td>UEL</td>
<td>Data lacking</td>
</tr>
<tr>
<td>LEL</td>
<td>Not relevant</td>
<td>Autoignition</td>
<td>Data lacking</td>
</tr>
</tbody>
</table>
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

<table>
<thead>
<tr>
<th>Components</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Quartz (&lt; 0.1%)</strong></td>
</tr>
<tr>
<td>14808-60-7</td>
</tr>
<tr>
<td>Multi-dose Toxicity:</td>
</tr>
<tr>
<td>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 28 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</td>
</tr>
</tbody>
</table>

| **Toluene (2.4%)**                             |
| 108-88-3                                       |
| Acute Toxicity:                                |
| Ingestion/Oral-Rat LD50 • 636 mg/kg; Inhalation-Rat LC50 • 49 g/m³ 4 Hour(s); Inhalation-Human TCLo • 1500 mg/m³ 8 Hour(s); Sense Organs and Special Senses:Eye:Lacration; Sense Organs and Special Senses:Eye:Conjunctive irritation; Behavioral:Ataxia; Inhalation-Human TCLo • 200 ppm; Brain and Coverings:Recordings from specific areas of CNS: Behavioral:Antipsychotic; Blood:Changes in bone marrow not included above; Inhalation-Man TCLo • 50 ppm; Kidney, Ureter, and Bladder: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; Behavioral:Convulsions or effect on seizure threshold: Behavioral:Abuse: Inhalation-Mouse TCLo • 50 ppm 12 Week(s)-Intermittent; Brain and Coverings:Other degenerative changes: Inhalation-Rat TCLo • 10 ppm 6 Hour(s) 13 Week(s)-Intermittent; Brain and Coverings: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/m³ 16 Week(s)-Intermittent; Reproductive: Inhalation-Mouse TCLo • 500 mg/m³ 24 Hour(s)(6-13D preg); Reproductive Effects:Effects on Embryo or Fetus:Fetotoxicity (except death, e.g., stunted fetus): Inhalation-Mouse TCLo • 200 ppm 7 Hour(s)(7-16D preg); Reproductive Effects:Specific Developmental Abnormalities:Urogenital system |
Acetone
(< 45%)

<table>
<thead>
<tr>
<th></th>
<th>Acute Toxicity: Ingestion/Oral-Rat LD50 • 5800 mg/kg; Inhalation-Rat LC50 • 50100 mg/m³;</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Irritation: Eye-Rabbit • 20 mg • Severe irritation; Skin-Rabbit • 395 mg-Open • Mild irritation;</td>
</tr>
<tr>
<td></td>
<td>Reproductive: Inhalation-Rat TCLo • 11000 ppm (6-19D preg); Reproductive Effects:Specific Developmental Abnormalities:Other developmental abnormalities</td>
</tr>
</tbody>
</table>

### GHS Properties and Classification

<table>
<thead>
<tr>
<th>Property</th>
<th>EU/CLP</th>
<th>OSHA HCS 2012</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute toxicity</td>
<td>Data lacking</td>
<td>Data lacking</td>
<td></td>
</tr>
<tr>
<td>Aspiration Hazard</td>
<td>Data lacking</td>
<td>Data lacking</td>
<td></td>
</tr>
<tr>
<td>Carcinogenicity</td>
<td>Data lacking</td>
<td>Data lacking</td>
<td></td>
</tr>
<tr>
<td>Germ Cell Mutagenicity</td>
<td>Data lacking</td>
<td>Germ Cell Mutagenicity 1B</td>
<td></td>
</tr>
<tr>
<td>Skin corrosion/Irritation</td>
<td>Data lacking</td>
<td>Data lacking</td>
<td></td>
</tr>
<tr>
<td>Skin sensitization</td>
<td>Data lacking</td>
<td>Data lacking</td>
<td></td>
</tr>
<tr>
<td>STOT-RE</td>
<td>Specific Target Organ Toxicity Repeated Exposure 1; Specific Target Organ Toxicity Repeated Exposure 2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>STOT-SE</td>
<td>Specific Target Organ Toxicity Single Exposure 3: Narcotic Effects</td>
<td>Specific Target Organ Toxicity Single Exposure 3: Narcotic Effects</td>
<td></td>
</tr>
<tr>
<td>Toxicity for Reproduction</td>
<td>Data lacking</td>
<td>Toxic to Reproduction 2</td>
<td></td>
</tr>
<tr>
<td>Respiratory sensitization</td>
<td>Data lacking</td>
<td>Data lacking</td>
<td></td>
</tr>
<tr>
<td>Serious eye damage/Irritation</td>
<td>Eye Irritation 2</td>
<td>Eye Irritation 2</td>
<td></td>
</tr>
</tbody>
</table>

### 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 snifng 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

---

Preparation Date: 12/September/2014
Revision Date: 12/September/2014
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.

<table>
<thead>
<tr>
<th>Carcinogenic Effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAS</td>
</tr>
<tr>
<td>Quartz</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>14.1 UN number</th>
<th>14.2 UN proper shipping name</th>
<th>14.3 Transport hazard class(es)</th>
<th>14.4 Packing group</th>
<th>14.5 Environmental hazards</th>
</tr>
</thead>
<tbody>
<tr>
<td>DOT</td>
<td>NDA</td>
<td>Consumer Commodity, ORM-D</td>
<td>NDA</td>
<td>NDA</td>
</tr>
<tr>
<td>TDG</td>
<td>NDA</td>
<td>CONSUMER COMMODITY, ORM-D</td>
<td>NDA</td>
<td>NDA</td>
</tr>
<tr>
<td>IMO/IMDG</td>
<td>UN1950</td>
<td>AEROSOLS, FLAMMABLE</td>
<td>2.1</td>
<td>NDA</td>
</tr>
</tbody>
</table>
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)

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS</th>
<th>Canada DSL</th>
<th>Canada NDSL</th>
<th>EU EINECS</th>
<th>EU ELNICS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acetone</td>
<td>67-64-1</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Graphite</td>
<td>7782-42-5</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Naphtha (petroleum), hydrotreated light</td>
<td>64742-49-0</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Propane</td>
<td>74-98-6</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Quartz</td>
<td>14808-60-7</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Toluene</td>
<td>108-88-3</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>

Canada - WHMIS - Classifications of Substances

- Naphtha (petroleum), hydrotreated light
- Acetone
- Propane
- Toluene
- Quartz
- Graphite
- Graphite as Particulates not otherwise classified (PNOC)

Canada - WHMIS - Ingredient Disclosure List

- Naphtha (petroleum), hydrotreated light
- Acetone
- Propane
- Toluene
- Quartz
- Graphite
- Graphite as Particulates not otherwise classified (PNOC)
### Environment

**Canada - CEPA - Priority Substances List**

- Naphtha (petroleum), hydrotreated light
- Acetone
- Propane
- Toluene
- Quartz
- Graphite
- Graphite as Particulates not otherwise classified (PNOC)

**Europe**

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

- Naphtha (petroleum), hydrotreated light
- Acetone
- Propane
- Toluene
- Quartz
- Graphite
- Graphite as Particulates not otherwise classified (PNOC)

**United States**

**Labor**

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

- Naphtha (petroleum), hydrotreated light
- Acetone
- Propane
- Toluene
- Quartz
- Graphite
- Graphite as Particulates not otherwise classified (PNOC)

**U.S. - OSHA - Specifically Regulated Chemicals**

- Naphtha (petroleum), hydrotreated light
- Acetone
- Propane
- Toluene
- Quartz
- Graphite
- Graphite as Particulates not otherwise classified (PNOC)

**Environment**

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

- Naphtha (petroleum), hydrotreated light
- Acetone
- Propane
- Toluene
- Quartz
- Graphite
- Graphite as Particulates not otherwise classified (PNOC)
# U.S. - CERCLA/SARA - Hazardous Substances and their Reportable Quantities

<table>
<thead>
<tr>
<th>Substance</th>
<th>CAS Number</th>
<th>Reportable Quantity</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Naphtha (petroleum), hydrotreated light</td>
<td>64742-49-0</td>
<td>Not Listed</td>
<td>5000 lb final RQ; 2270 kg final RQ</td>
</tr>
<tr>
<td>Acetone</td>
<td>67-64-1</td>
<td>Not Listed</td>
<td></td>
</tr>
<tr>
<td>Propane</td>
<td>74-98-6</td>
<td>Not Listed</td>
<td></td>
</tr>
<tr>
<td>Toluene</td>
<td>108-88-3</td>
<td>1000 lb final RQ; 454 kg final RQ</td>
<td></td>
</tr>
<tr>
<td>Quartz</td>
<td>14808-60-7</td>
<td>Not Listed</td>
<td></td>
</tr>
<tr>
<td>Graphite</td>
<td>7782-42-5</td>
<td>Not Listed</td>
<td></td>
</tr>
<tr>
<td>Graphite as Particulates not otherwise classified (PNOC)</td>
<td></td>
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<td></td>
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</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Substance</th>
<th>CAS Number</th>
<th>Reportable Quantity</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Naphtha (petroleum), hydrotreated light</td>
<td>64742-49-0</td>
<td>Not Listed</td>
<td></td>
</tr>
<tr>
<td>Acetone</td>
<td>67-64-1</td>
<td>Not Listed</td>
<td></td>
</tr>
<tr>
<td>Propane</td>
<td>74-98-6</td>
<td>Not Listed</td>
<td></td>
</tr>
<tr>
<td>Toluene</td>
<td>108-88-3</td>
<td>Not Listed</td>
<td></td>
</tr>
<tr>
<td>Quartz</td>
<td>14808-60-7</td>
<td>Not Listed</td>
<td></td>
</tr>
<tr>
<td>Graphite</td>
<td>7782-42-5</td>
<td>Not Listed</td>
<td></td>
</tr>
<tr>
<td>Graphite as Particulates not otherwise classified (PNOC)</td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Substance</th>
<th>CAS Number</th>
<th>Reportable Quantity</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Naphtha (petroleum), hydrotreated light</td>
<td>64742-49-0</td>
<td>Not Listed</td>
<td></td>
</tr>
<tr>
<td>Acetone</td>
<td>67-64-1</td>
<td>Not Listed</td>
<td></td>
</tr>
<tr>
<td>Propane</td>
<td>74-98-6</td>
<td>Not Listed</td>
<td></td>
</tr>
<tr>
<td>Toluene</td>
<td>108-88-3</td>
<td>Not Listed</td>
<td></td>
</tr>
<tr>
<td>Quartz</td>
<td>14808-60-7</td>
<td>Not Listed</td>
<td></td>
</tr>
<tr>
<td>Graphite</td>
<td>7782-42-5</td>
<td>Not Listed</td>
<td></td>
</tr>
<tr>
<td>Graphite as Particulates not otherwise classified (PNOC)</td>
<td></td>
<td>Not Listed</td>
<td></td>
</tr>
</tbody>
</table>

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

<table>
<thead>
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<th>CAS Number</th>
<th>Reportable Quantity</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Naphtha (petroleum), hydrotreated light</td>
<td>64742-49-0</td>
<td>Not Listed</td>
<td></td>
</tr>
<tr>
<td>Acetone</td>
<td>67-64-1</td>
<td>Not Listed</td>
<td></td>
</tr>
<tr>
<td>Propane</td>
<td>74-98-6</td>
<td>Not Listed</td>
<td></td>
</tr>
<tr>
<td>Toluene</td>
<td>108-88-3</td>
<td>Not Listed</td>
<td></td>
</tr>
<tr>
<td>Quartz</td>
<td>14808-60-7</td>
<td>Not Listed</td>
<td></td>
</tr>
<tr>
<td>Graphite</td>
<td>7782-42-5</td>
<td>Not Listed</td>
<td></td>
</tr>
<tr>
<td>Graphite as Particulates not otherwise classified (PNOC)</td>
<td></td>
<td>Not Listed</td>
<td></td>
</tr>
</tbody>
</table>

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

<table>
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<tr>
<th>Substance</th>
<th>CAS Number</th>
<th>Reportable Quantity</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Naphtha (petroleum), hydrotreated light</td>
<td>64742-49-0</td>
<td>Not Listed</td>
<td></td>
</tr>
<tr>
<td>Acetone</td>
<td>67-64-1</td>
<td>Not Listed</td>
<td></td>
</tr>
<tr>
<td>Propane</td>
<td>74-98-6</td>
<td>Not Listed</td>
<td></td>
</tr>
<tr>
<td>Toluene</td>
<td>108-88-3</td>
<td>1.0 % de minimis concentration</td>
<td></td>
</tr>
<tr>
<td>Quartz</td>
<td>14808-60-7</td>
<td>Not Listed</td>
<td></td>
</tr>
<tr>
<td>Graphite</td>
<td>7782-42-5</td>
<td>Not Listed</td>
<td></td>
</tr>
<tr>
<td>Graphite as Particulates not otherwise classified (PNOC)</td>
<td></td>
<td>Not Listed</td>
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</table>

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

<table>
<thead>
<tr>
<th>Substance</th>
<th>CAS Number</th>
<th>Reportable Quantity</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Naphtha (petroleum), hydrotreated light</td>
<td>64742-49-0</td>
<td>Not Listed</td>
<td></td>
</tr>
<tr>
<td>Acetone</td>
<td>67-64-1</td>
<td>Not Listed</td>
<td></td>
</tr>
<tr>
<td>Propane</td>
<td>74-98-6</td>
<td>Not Listed</td>
<td></td>
</tr>
<tr>
<td>Toluene</td>
<td>108-88-3</td>
<td>Not Listed</td>
<td></td>
</tr>
<tr>
<td>Quartz</td>
<td>14808-60-7</td>
<td>Not Listed</td>
<td></td>
</tr>
</tbody>
</table>
### United States - California

#### Environment

**U.S. - California - Proposition 65 - Carcinogens List**
- Naphtha (petroleum), hydrotreated light
  - CAS No: 64742-49-0
  - Not Listed
- Acetone
  - CAS No: 67-64-1
  - Not Listed
- Propane
  - CAS No: 74-98-6
  - Not Listed
- Toluene
  - CAS No: 108-88-3
  - Not Listed (carcinogen, initial date 10/1/88)
- Quartz
  - CAS No: 14808-60-7
  - Not Listed (airborne particles of respirable size)
- Graphite
  - CAS No: 7782-42-5
  - Not Listed
- Graphite as Particulates not otherwise classified (PNOC)
  - CAS No: Not Listed

**U.S. - California - Proposition 65 - Developmental Toxicity**
- Naphtha (petroleum), hydrotreated light
  - CAS No: 64742-49-0
  - Not Listed
- Acetone
  - CAS No: 67-64-1
  - Not Listed
- Propane
  - CAS No: 74-98-6
  - Not Listed (developmental toxicity, initial date 1/1/91)
- Toluene
  - CAS No: 108-88-3
  - Not Listed
- Quartz
  - CAS No: 14808-60-7
  - Not Listed
- Graphite
  - CAS No: 7782-42-5
  - Not Listed
- Graphite as Particulates not otherwise classified (PNOC)
  - CAS No: Not Listed

**U.S. - California - Proposition 65 - Maximum Allowable Dose Levels (MADL)**
- Naphtha (petroleum), hydrotreated light
  - CAS No: 64742-49-0
  - Not Listed
- Acetone
  - CAS No: 67-64-1
  - Not Listed
- Propane
  - CAS No: 74-98-6
  - Not Listed
- Toluene
  - CAS No: 108-88-3
  - Not Listed
- Quartz
  - CAS No: 14808-60-7
  - Not Listed
- Graphite
  - CAS No: 7782-42-5
  - Not Listed
- Graphite as Particulates not otherwise classified (PNOC)
  - CAS No: Not Listed

**U.S. - California - Proposition 65 - No Significant Risk Levels (NSRL)**
- Naphtha (petroleum), hydrotreated light
  - CAS No: 64742-49-0
  - Not Listed
- Acetone
  - CAS No: 67-64-1
  - Not Listed
- Propane
  - CAS No: 74-98-6
  - Not Listed
- Toluene
  - CAS No: 108-88-3
  - Not Listed
- Quartz
  - CAS No: 14808-60-7
  - Not Listed
- Graphite
  - CAS No: 7782-42-5
  - Not Listed
- Graphite as Particulates not otherwise classified (PNOC)
  - CAS No: Not Listed

**U.S. - California - Proposition 65 - Reproductive Toxicity - Female**
- Naphtha (petroleum), hydrotreated light
  - CAS No: 64742-49-0
  - Not Listed
- Acetone
  - CAS No: 67-64-1
  - Not Listed
- Propane
  - CAS No: 74-98-6
  - Not Listed
- Toluene
  - CAS No: 108-88-3
  - Not Listed
- Quartz
  - CAS No: 14808-60-7
  - Not Listed
- Graphite
  - CAS No: 7782-42-5
  - Not Listed
- Graphite as Particulates not otherwise classified (PNOC)
  - CAS No: 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)

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
12/September/2014

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