Safety Data Sheet

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

1.1 Product identifier

Product Name: SLIP Plate No. 3

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:
- Southwestern Graphite (Division of Asbury Carbons)
  25014 Highway, 12
  DeQuincy, LA 70633
  (337) 706-5905
- Cummings Moore Graphite (Division of Asbury Carbons)
  1546 N. Green Avenue
  Detroit, MI 48209
  (313) 541-1615

1.4 Emergency telephone number

Manufacturer
- US: 1-800-255-3924; International: +01-813-248-0585; China: 400-120-0751;
- Brazil: 0-800-591-6042; India: 000-800-100-4086; Mexico: 01-800-099-0731
- ChemTel contract number: MIS0001931 (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 Liquids 2 - H225
- Aspiration 1 - H304
- Skin Irritation 2 - H315
- Reproductive Toxicity 2 - H361d
- Hazardous to the aquatic environment Chronic 2 - H411

DSD/DPD
- Highly Flammable (F)
- Harmful (Xn)
- Substances Toxic To Reproduction - Category 3
- Dangerous to the Environment (N)
- R11, R63, R65, R51, R53

2.2 Label Elements

CLP

DANGER
Precautionary statements

P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P363 - Wash contaminated clothing before reuse.
P332+P313 - If skin irritation occurs: Get medical advice/attention.
P321 - Specific treatment, see supplemental first aid information.
P301+P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P331 - Do NOT induce vomiting.
P308+P313 - IF exposed or concerned: Get medical advice/attention.
P314 - Get medical advice/attention if you feel unwell.
P391 - Collect spillage.

Storage/Disposal

P403+P235 - Store in a well-ventilated place. Keep cool.

2.3 Other Hazards

CLP

DSD/DPD

R63 - Possible risk of harm to the unborn child.
R65 - Harmful: may cause lung damage if swallowed.
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

United States (US)

According to: OSHA 29 CFR 1910.1200 HCS
2.1 Classification of the substance or mixture

OSHA HCS 2012
- Flammable Liquids 2
  - Skin Irritation 2
  - Eye Irritation 2
  - Reproductive Toxicity 2

2.2 Label elements

OSHA HCS 2012

DANGER

Hazard statements
- Highly flammable liquid and vapour
- Causes skin irritation
- Causes serious eye irritation
- Suspected of damaging fertility or the unborn child.

Precautionary statements

Prevention
- Obtain special instructions before use.
- Do not handle until all safety precautions have been read and understood.
- Keep away from heat, sparks, open flames and/or hot surfaces.
- Keep container tightly closed.
- Ground and/or bond container and receiving equipment.
- Use explosion-proof electrical/ventilating/lighting/equipment.
- Use only non-sparking tools.
- Take precautionary measures against static discharge.
- Wear protective gloves - and eye/face protection.
- In case of fire: Use appropriate media for extinction.
- If ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
- If skin irritation occurs: Get medical advice/attention.
- Specific treatment, see supplemental first aid information.
- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- If eye irritation persists: Get medical advice/attention.
- IF exposed or concerned: Get medical advice/attention.
- Get medical advice/attention if you feel unwell.

Response
- Store in a well-ventilated place. Keep cool.
- Store locked up.
- Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

2.3 Other hazards

OSHA HCS 2012

Canada

According to: WHMIS

2.1 Classification of the substance or mixture

WHMIS
- Flammable Liquids - B2
  - Other Toxic Effects - D2A

2.2 Label elements

WHMIS
### 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

<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>Naphtha (petroleum), hydrotreated light</td>
<td>CAS:64742-49 0 EC Number:265-151-9 EU Index:649-328-00-1</td>
<td>&lt; 55%</td>
<td>NDA</td>
<td>EU DSD/DPD: Annex VI, Table 3.2: Carc.Cat.2 R45 Mutat.Cat.2 R46 Xn R65 EU CLP: Annex VI, Table 3.1: Carc. 1B, H350; Mutat. 1B, H340; Asp. Tox. 1, H304 OSHA HCS 2012: Not Classified</td>
<td>Contains &lt;0.1% Benzene therefore carcinogen and mutagen classifications do not apply</td>
</tr>
<tr>
<td>Heptane</td>
<td>CAS:142-82-5 EC Number:205-563-8 EU Index:601-008-00-2</td>
<td>6%</td>
<td>Inhalation-Rat LC50 • 103 g/m³ 4 Hour(s)</td>
<td>EU DSD/DPD: Annex VI, Table 3.2: F R11 X 8 N R50-53 Xn R65 67 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, Acute 1, H360; Aquatic Chronic 1, H410 OSHA HCS 2012: Flam. Liq. 2; Skin Irrit. 2; Eye Irrit. 2; Asp. Tox. 1; STOT SE 3: Narc.</td>
<td>NDA</td>
</tr>
<tr>
<td>Toluene</td>
<td>CAS:108-88-3 EC Number:203-625-9 EU Index:601-021-00-3</td>
<td>5%</td>
<td>Ingestion/Oral-Rat LD50 • 636 mg/kg Inhalation-Rat LC50 • 49 g/m³ 4 Hour(s) Skin-Rabbit LD50 • 1410 µL/kg</td>
<td>EU DSD/DPD: Annex VI, Table 3.2: F R11 X 8 N R48/20-65 Repr.Cat.3 R67 67 EU CLP: Annex VI, Table 3.1: Flam. Liq. 2, H225; Skin Irrit. 2, H315; Repr. 2, H361; 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, Inhal); Asp. Tox. 1</td>
<td>NDA</td>
</tr>
<tr>
<td>Quartz</td>
<td>CAS:14808-60-7 EC Number:238-878-4</td>
<td>&lt; 1%</td>
<td>NDA</td>
<td>EU DSD/DPD: Self Classified: T R48/20 Carc. Cat. 1 R49 EU CLP: Self Classified: STOT RE 1 (Lungs, Inhal); H372; Carc. 1A, H350 OSHA HCS 2012: STOT RE 1 (Lungs, Inhal); Carc. 1A</td>
<td>NDA</td>
</tr>
</tbody>
</table>
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. Administer oxygen if breathing is difficult. Give artificial respiration if victim is not breathing. Get medical attention if symptoms occur.

**Skin**
- In case of burns, immediately cool affected skin for as long as possible with cold water. Do not remove clothing if adhering to skin. In case of contact with substance, immediately flush skin with running water for at least 20 minutes. Remove and isolate contaminated clothing. Wash skin with soap and water.

**Eye**
- 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.

**Ingestion**
- 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**

<table>
<thead>
<tr>
<th>Suitable Extinguishing Media</th>
<th>Unsuitable Extinguishing Media</th>
</tr>
</thead>
<tbody>
<tr>
<td>LARGE FIRES: Water spray, fog or alcohol-resistant foam.</td>
<td>No data available</td>
</tr>
<tr>
<td>SMALL FIRES: Dry chemical, CO2, water spray or alcohol-resistant foam.</td>
<td></td>
</tr>
</tbody>
</table>

5.2 **Special hazards arising from the substance or mixture**

<table>
<thead>
<tr>
<th>Unusual Fire and Explosion Hazards</th>
<th>Hazardous Combustion Products</th>
</tr>
</thead>
<tbody>
<tr>
<td>Containers may explode when heated.</td>
<td>No data available</td>
</tr>
<tr>
<td>Vapor explosion hazard indoors, outdoors or in sewers.</td>
<td></td>
</tr>
<tr>
<td>HIGHLY FLAMMABLE: Will be easily ignited by heat, sparks or flames.</td>
<td></td>
</tr>
<tr>
<td>Many liquids are lighter than water.</td>
<td></td>
</tr>
<tr>
<td>Most vapors are heavier than air. They will spread along ground and collect in low or confined areas (sewers, basements, tanks).</td>
<td></td>
</tr>
<tr>
<td>Runoff to sewer may create fire or explosion hazard.</td>
<td></td>
</tr>
<tr>
<td>Vapors may form explosive mixtures with air.</td>
<td></td>
</tr>
<tr>
<td>Vapors may travel to source of ignition and flash back.</td>
<td></td>
</tr>
</tbody>
</table>

5.3 **Advice for firefighters**

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

**Section 6 - Accidental Release Measures**

Preparation Date: 27/March/2015
Revision Date: 06/26/2017

Format: EU CLP/REACH Language: English (US)
WHMIS, EU CLP, EU DSD/DPD, OSHA HCS 2012
6.1 Personal precautions, protective equipment and emergency procedures

Personal Precautions
Ensure adequate ventilation to remove vapors, fumes, dust etc. CAUTION: Victim may be a source of contamination. Do not walk through spilled material. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Contaminated clothing may be a fire risk when dry.

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

6.2 Environmental precautions
Prevent entry into waterways, sewers, basements or confined areas.

6.3 Methods and material for containment and cleaning up

Containment/Clean-up Measures
Stop leak if you can do it without risk. Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers. Use clean non-sparking tools to collect absorbed material. A vapor suppressing foam may be used to reduce vapors. All equipment used when handling the product must be grounded. LARGE SPILLS: Diike far ahead of liquid spill for later disposal. LARGE SPILLS: Water spray may reduce vapor; but may not prevent ignition in closed spaces. 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
All equipment used when handling the product must be grounded. Keep away from fire - No Smoking. Keep away from heat and sparks. Do not use sparking tools. Take precautionary measures against static charges. Use only in well ventilated areas. Wear appropriate personal protective equipment, avoid direct contact. Do not breathe mist, vapours, spray. Avoid contact with eyes, skin and clothing. Wash thoroughly with soap and water after handling and before eating, drinking, or using tobacco.

7.2 Conditions for safe storage, including any incompatibilities

Storage
Store in a well-ventilated place. Keep container tightly closed. Do not store above 120 F. Store locked up.

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></td>
<td></td>
<td>TWAs</td>
<td>TWA</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.025 mg/m3</td>
<td>(respirable fraction)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Not established</td>
<td></td>
<td>0.05 mg/m3 TWA</td>
<td>(respirable dust)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>STELs</td>
<td>100 ppm STEL; 384 mg/m3</td>
<td></td>
<td>150 ppm STEL; 560 mg/m3</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>STEL</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### 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 chemical splash 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

TWA = Time-Weighted Averages are based on 8h/day, 40h/week exposures  
STEL = Short Term Exposure Limits are based on 15-minute exposures

---

### Section 9 - Physical and Chemical Properties

#### 9.1 Information on Physical and Chemical Properties

**Material Description**

<table>
<thead>
<tr>
<th>Physical Form</th>
<th>Liquid</th>
<th>Appearance/Description</th>
<th>Dark gray liquid with a naphtha odor.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Color</td>
<td>Dark gray.</td>
<td>Odor</td>
<td>Naphtha</td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>Data lacking</td>
<td>Data lacking</td>
<td>Data lacking</td>
</tr>
</tbody>
</table>

**General Properties**

<table>
<thead>
<tr>
<th>Boiling Point</th>
<th>212 to 300 °F(100 to 148.8889 °C)</th>
<th>Melting Point</th>
<th>Data lacking</th>
</tr>
</thead>
<tbody>
<tr>
<td>Decomposition Temperature</td>
<td>Data lacking</td>
<td>pH</td>
<td>Data lacking</td>
</tr>
<tr>
<td>Specific Gravity/Relative Density</td>
<td>= 0.93</td>
<td>Water Solubility</td>
<td>Slightly Soluble</td>
</tr>
<tr>
<td>Viscosity</td>
<td>1700 Centipoise (cPs, cP) or mPas</td>
<td>Explosive Properties</td>
<td>Data lacking</td>
</tr>
<tr>
<td>Oxidizing Properties</td>
<td>Data lacking</td>
<td>Data lacking</td>
<td>Data lacking</td>
</tr>
</tbody>
</table>

**Vapor Pressure**

<table>
<thead>
<tr>
<th>Vapor Pressure</th>
<th>18 mmHg (torr) @ 68 F(20 °C)</th>
<th>Vapor Density</th>
<th>4.1 Air=1</th>
</tr>
</thead>
</table>
Environmental Flammability

<table>
<thead>
<tr>
<th>Environmental</th>
<th>Octanol/Water Partition coefficient</th>
<th>Data lacking</th>
</tr>
</thead>
</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 under normal temperatures and pressures.

10.3 Possibility of hazardous reactions

Hazardous polymerization will not occur.

10.4 Conditions to avoid


10.5 Incompatible materials

Strong oxidizing agents, acids, and alkalies.

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>
</table>

- **Acute Toxicity:** Ingestion/Oral-Rat LD50 = 636 mg/kg; Inhalation-Rat LC50 = 49 g/m³ 4 Hour(s); 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-Human TClO • 1500 mg/m³ 8 Hour(s); **Sense Organs and Special Senses:** Eye; Lacrimation; Sense Organs and Special Senses: Eye; Conjunctive irritation; Behavioral: Ataxia; 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 pre-g); **Reproductive Effects:** Effects on Embryo or Fetus; **Fetotoxicity (except death, e.g., stunted fetus):** Inhalation-Mouse TClO • 200 ppm 7 Hour(s)(7-16D pre-g);
### Reproductive Effects: Specific Developmental Abnormalities

Urogenital system

<table>
<thead>
<tr>
<th>Heptane (6%)</th>
<th>Acute Toxicity: Inhalation-Rat LC50 • 103 g/m³ 4 Hour(s)</th>
</tr>
</thead>
</table>

#### GHS Properties Classification

<table>
<thead>
<tr>
<th></th>
<th>EU/CLP • Data lacking</th>
<th>OSHA HCS 2012 • Data lacking</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute toxicity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aspiration Hazard</td>
<td>EU/CLP • Aspiration 1</td>
<td>OSHA HCS 2012 • Data lacking</td>
</tr>
<tr>
<td>Carcinogenicity</td>
<td>EU/CLP • Data lacking</td>
<td>OSHA HCS 2012 • Data lacking</td>
</tr>
<tr>
<td>Germ Cell Mutagenicity</td>
<td>EU/CLP • Data lacking</td>
<td>OSHA HCS 2012 • Data lacking</td>
</tr>
<tr>
<td>Skin corrosion/Irritation</td>
<td>EU/CLP • Skin Irritation 2</td>
<td>OSHA HCS 2012 • Skin Irritation 2</td>
</tr>
<tr>
<td>Skin sensitization</td>
<td>EU/CLP • Data lacking</td>
<td>OSHA HCS 2012 • Data lacking</td>
</tr>
<tr>
<td>STOT-RE</td>
<td>EU/CLP • Data lacking</td>
<td>OSHA HCS 2012 • Data lacking</td>
</tr>
<tr>
<td>STOT-SE</td>
<td>EU/CLP • Data lacking</td>
<td>OSHA HCS 2012 • Data lacking</td>
</tr>
<tr>
<td>Toxicity for Reproduction</td>
<td>EU/CLP • Toxic to Reproduction 2</td>
<td>OSHA HCS 2012 • Toxic to Reproduction 2</td>
</tr>
<tr>
<td>Respiratory sensitization</td>
<td>EU/CLP • Data lacking</td>
<td>OSHA HCS 2012 • Data lacking</td>
</tr>
<tr>
<td>Serious eye damage/Irritation</td>
<td>EU/CLP • Data lacking</td>
<td>OSHA HCS 2012 • Eye Irritation 2</td>
</tr>
</tbody>
</table>

### Potential Health Effects

#### Inhalation

**Acute (Immediate)**: May cause irritation.
**Chronic (Delayed)**: No data available.

#### Skin

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

#### Eye

**Acute (Immediate)**: Causes serious eye irritation.
**Chronic (Delayed)**: No data available

#### Ingestion

**Acute (Immediate)**: May cause gastrointestinal disturbances including diarrhea, nausea, and vomiting. Small amounts aspirated into the respiratory system during ingestion or from vomiting may cause bronchopneumonia or pulmonary edema, a possibly fatal condition.
**Chronic (Delayed)**: No data available

#### Carcinogenic Effects

This material contains Quartz which is considered a carcinogen, however this material as a whole is not classified as a carcinogen.
### Section 12 - Ecological Information

#### 12.1 Toxicity
- Toxic to aquatic life with long lasting effects.

#### 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
- PBT and vPvB assessment has not been conducted for this material.

#### 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>UN1993</td>
<td>Flammable liquid, n.o.s. (contains naphtha &amp; heptane solution)</td>
<td>3</td>
<td>II</td>
</tr>
<tr>
<td>TDG</td>
<td>UN1993</td>
<td>FLAMMABLE LIQUID, N.O.S. (contains naphtha &amp; heptane solution)</td>
<td>3</td>
<td>II</td>
</tr>
<tr>
<td>IMO/IMDG</td>
<td>UN1993</td>
<td>FLAMMABLE LIQUID, N.O.S. (contains naphtha &amp; heptane solution)</td>
<td>3</td>
<td>II</td>
</tr>
<tr>
<td>IATA/ICAO</td>
<td>UN1993</td>
<td>Flammable liquid, n.o.s. (contains naphtha &amp; heptane solution)</td>
<td>3</td>
<td>II</td>
</tr>
</tbody>
</table>
14.6 Special precautions for user

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

<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>Graphite</td>
<td>7782-42-5</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Heptane</td>
<td>142-82-5</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>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

Labor

Canada - WHMIS - Classifications of Substances
- Naphtha (petroleum), hydrotreated light
- Heptane
- Toluene

- Quartz

- Graphite

Canada - WHMIS - Ingredient Disclosure List
- Naphtha (petroleum), hydrotreated light
- Heptane
- Toluene
- Quartz
- Graphite

Environment

Canada - CEPA - Priority Substances List
- Naphtha (petroleum), hydrotreated light
- Heptane
- Toluene

Revision Date: 06/26/2017
Preparation Date: 27/March/2015
### Europe

#### Other

**EU - Hazardous Substances Restricted or Prohibited in Electrical Equipment (2011/65/EU) (RoHS)**
- Naphtha (petroleum), hydrotreated light 64742-49-0 Not Listed
- Heptane 142-82-5 Not Listed
- Toluene 108-88-3 Not Listed
- Quartz 14808-60-7 Not Listed
- Graphite 7782-42-5 Not Listed

### Japan

#### Environment

**Inventory - Japan - Industrial Safety and Health Law Substances (ISHL)**
- Naphtha (petroleum), hydrotreated light 64742-49-0 Not Listed
- Heptane 142-82-5 Not Listed
- Toluene 108-88-3 Not Listed
- Quartz 14808-60-7 Not Listed
- Graphite 7782-42-5 Not Listed

#### Other

**Japan - Chemical Substance Control Law (CSCL) - Monitoring Chemical Substances**
- Naphtha (petroleum), hydrotreated light 64742-49-0 Not Listed
- Heptane 142-82-5 Not Listed
- Toluene 108-88-3 Not Listed
- Quartz 14808-60-7 Not Listed
- Graphite 7782-42-5 Not Listed

**Japan - Poisonous and Deleterious Substances - Substances Not Considered Deleterious**
- Naphtha (petroleum), hydrotreated light 64742-49-0 Not Listed
- Heptane 142-82-5 Not Listed
- Toluene 108-88-3 Not Listed
- Quartz 14808-60-7 Not Listed
- Graphite 7782-42-5 Not Listed

**Japan - Poisonous and Deleterious Substances - Substances Not Considered Poisonous**
- Naphtha (petroleum), hydrotreated light 64742-49-0 Not Listed
- Heptane 142-82-5 Not Listed
- Toluene 108-88-3 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 Chemicals**
- Naphtha (petroleum), hydrotreated light 64742-49-0 Not Listed
- Heptane 142-82-5 Not Listed
- Toluene 108-88-3 Not Listed
- Quartz 14808-60-7 Not Listed
- Graphite 7782-42-5 Not Listed
<table>
<thead>
<tr>
<th>U.S. - OSHA - Specifically Regulated Chemicals</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Naphtha (petroleum), hydrotreated light</td>
</tr>
<tr>
<td>• Heptane</td>
</tr>
<tr>
<td>• Toluene</td>
</tr>
<tr>
<td>• Quartz</td>
</tr>
<tr>
<td>• Graphite</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Environment</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S. - CAA (Clean Air Act) - 1990 Hazardous Air Pollutants</td>
</tr>
<tr>
<td>• Naphtha (petroleum), hydrotreated light</td>
</tr>
<tr>
<td>• Heptane</td>
</tr>
<tr>
<td>• Toluene</td>
</tr>
<tr>
<td>• Quartz</td>
</tr>
<tr>
<td>• Graphite</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>U.S. - CERCLA/SARA - Hazardous Substances and their Reportable Quantities</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Naphtha (petroleum), hydrotreated light</td>
</tr>
<tr>
<td>• Heptane</td>
</tr>
<tr>
<td>• Toluene</td>
</tr>
<tr>
<td>• Quartz</td>
</tr>
<tr>
<td>• Graphite</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>U.S. - CERCLA/SARA - Radionuclides and Their Reportable Quantities</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Naphtha (petroleum), hydrotreated light</td>
</tr>
<tr>
<td>• Heptane</td>
</tr>
<tr>
<td>• Toluene</td>
</tr>
<tr>
<td>• Quartz</td>
</tr>
<tr>
<td>• Graphite</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>U.S. - CERCLA/SARA - Section 302 Extremely Hazardous Substances EPCRA RQs</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Naphtha (petroleum), hydrotreated light</td>
</tr>
<tr>
<td>• Heptane</td>
</tr>
<tr>
<td>• Toluene</td>
</tr>
<tr>
<td>• Quartz</td>
</tr>
<tr>
<td>• Graphite</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>U.S. - CERCLA/SARA - Section 302 Extremely Hazardous Substances TPQs</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Naphtha (petroleum), hydrotreated light</td>
</tr>
<tr>
<td>• Heptane</td>
</tr>
<tr>
<td>• Toluene</td>
</tr>
<tr>
<td>• Quartz</td>
</tr>
<tr>
<td>• Graphite</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>U.S. - CERCLA/SARA - Section 313 - Emission Reporting</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Naphtha (petroleum), hydrotreated light</td>
</tr>
<tr>
<td>• Heptane</td>
</tr>
<tr>
<td>• Toluene</td>
</tr>
<tr>
<td>• Quartz</td>
</tr>
<tr>
<td>• Graphite</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>U.S. - CERCLA/SARA - Section 313 - PBT Chemical Listing</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Naphtha (petroleum), hydrotreated light</td>
</tr>
</tbody>
</table>

Preparation Date: 27/March/2015
Revision Date: 06/26/2017
<table>
<thead>
<tr>
<th>Substance</th>
<th>UN Number</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heptane</td>
<td>142-82-5</td>
<td>Not Listed</td>
</tr>
<tr>
<td>Toluene</td>
<td>108-88-3</td>
<td>Not Listed</td>
</tr>
<tr>
<td>Quartz</td>
<td>14808-60-7</td>
<td>Not Listed</td>
</tr>
<tr>
<td>Graphite</td>
<td>7782-42-5</td>
<td>Not Listed</td>
</tr>
</tbody>
</table>

### United States - California

#### Environment

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

- Naphtha (petroleum), hydrotreated light: 64742-49-0 Not Listed
- Heptane: 142-82-5 Not Listed
dead carcigen, initial date 10/1/88
- Toluene: 108-88-3 Not Listed
- Quartz: 14808-60-7 Not Listed
- Graphite: 7782-42-5 Not Listed

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

- Naphtha (petroleum), hydrotreated light: 64742-49-0 Not Listed
- Heptane: 142-82-5 Not Listed
developmental toxicity, initial date 1/1/91
- Toluene: 108-88-3 Not Listed
- Quartz: 14808-60-7 Not Listed
- Graphite: 7782-42-5 Not Listed

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

- Naphtha (petroleum), hydrotreated light: 64742-49-0 Not Listed
- Heptane: 142-82-5 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

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

- Naphtha (petroleum), hydrotreated light: 64742-49-0 Not Listed
- Heptane: 142-82-5 Not Listed
- Toluene: 108-88-3 Not Listed
- Quartz: 14808-60-7 Not Listed
- Graphite: 7782-42-5 Not Listed

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

- Naphtha (petroleum), hydrotreated light: 64742-49-0 Not Listed
- Heptane: 142-82-5 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

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

- Naphtha (petroleum), hydrotreated light: 64742-49-0 Not Listed
- Heptane: 142-82-5 Not Listed
- Toluene: 108-88-3 Not Listed
- Quartz: 14808-60-7 Not Listed
- Graphite: 7782-42-5 Not Listed
15.2 Chemical Safety Assessment

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, birth defects or other reproductive harm.

Section 16 - Other Information

Relevant Phrases (code & full text)

- H336 - May cause drowsiness or dizziness
- H340 - May cause genetic defects.
- H350 - May cause cancer.
- H372 - Causes damage to organs through prolonged or repeated exposure.
- H400 - Very toxic to aquatic life
- H410 - Very toxic to aquatic life with long lasting effects
- R38 - Irritating to skin.
- R45 - May cause cancer.
- R46 - May cause heritable genetic damage.
- R49 - May cause cancer by inhalation.
- R50 - Very toxic to aquatic organisms.
- R67 - Vapours may cause drowsiness and dizziness.

Last Revision Date

27/March/2015

Preparation Date

06/26/2017

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