

Safety Data Sheet



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

1.1 Product identifier

Product Name | SLIP Plate Penetrant Plus Aerosol

Product Code | 45550

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

Relevant identified use(s) | Lubricants & Coatings

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 - (8am-5pm CST, M-F)

1.4 Emergency telephone number

Manufacturer | 1-800-424-9300 - For Hazardous Materials [or Dangerous Goods] Incident Spill, Leak, Fire, Exposure, or Accident Call CHEMTREC Day or Night
Manufacturer | +1 703-527-3887 - Outside USA and Canada (collect calls accepted)

Section 2: Hazards Identification

EU/EEC

According to: Regulation (EC) No 1272/2008 (CLP)/REACH 1907/2006 [amended by 453/2010]
 According to: EU Directive 67/548/EEC (DSD) or 1999/45/EC (DPD)

2.1 Classification of the substance or mixture

CLP | Flammable Aerosols 1 - H222
 Skin Irritation 2 - H315
 EUH066
DSD/DPD | Extremely Flammable (F+)
 Irritant (Xi)
 Dangerous to the Environment (N)
 R12, R38, R51, R53, R66

2.2 Label Elements

CLP

DANGER



Hazard statements | H222 - Extremely flammable aerosol

H315 - Causes skin irritation
 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.
 P264 - Wash thoroughly after handling.
 P280 - Wear protective gloves .

Response | P302+P352 - IF ON SKIN: Wash with plenty of soap and water.
 P362 - Take off contaminated clothing and wash before reuse.
 P321 - Specific treatment, see supplemental first aid information.
 P332+P313 - If skin irritation occurs: Get medical advice/attention.

Storage/Disposal | P410+P412 - Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.

DSD/DPD



Risk phrases | R12 - Extremely flammable.
 R38 - Irritating to skin.
 R51 - Toxic to aquatic organisms.
 R53 - May cause long-term adverse effects in the aquatic environment.
 R66 - Repeated exposure may cause skin dryness or cracking.

Safety phrases | S9 - Keep container in a well ventilated place
 S16 - Keep away from sources of ignition - No Smoking.
 S57 - Use appropriate containment to avoid environmental contamination.

2.3 Other Hazards

CLP | According to Regulation (EC) No. 1272/2008 (CLP) this material is considered hazardous.

DSD/DPD | According to European Directive 1999/45/EC this material is considered dangerous.

United States (US)

According to: OSHA 29 CFR 1910.1200 HCS

2.1 Classification of the substance or mixture

OSHA HCS 2012 | Flammable Aerosols 1
 Skin Irritation 2
 Eye Irritation 2

2.2 Label elements

OSHA HCS 2012

DANGER



Hazard statements | Extremely flammable aerosol
 Causes skin irritation
 Causes serious eye irritation

Precautionary statements

Prevention | Keep away from heat, sparks, open flames and/or hot surfaces. - No smoking.
 Do not spray on an open flame or other ignition source.
 Pressurized container: Do not pierce or burn, even after use.
 Wash thoroughly after handling.
 Wear protective gloves and eye/face protection , .

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

Take off contaminated clothing and wash before reuse.

Specific treatment, see supplemental first aid information.

If skin irritation occurs: Get medical advice/attention.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

If eye irritation persists: Get medical advice/attention.

Storage/Disposal | Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.

2.3 Other hazards

OSHA HCS 2012

| Under United States Regulations (29 CFR 1910.1200 - Hazard Communication Standard), this product is considered hazardous.

Canada

According to: WHMIS

2.1 Classification of the substance or mixture

WHMIS

| Flammable Aerosols - B5
Other Toxic Effects - D2B

2.2 Label elements

WHMIS



| Flammable Aerosols - B5
Other Toxic Effects - D2B

2.3 Other hazards

WHMIS

| In Canada, the product mentioned above is considered hazardous under the Workplace Hazardous Materials Information System (WHMIS).

Section 3 - Composition/Information on Ingredients

3.1 Substances

| Material does not meet the criteria of a substance.

3.2 Mixtures

| Composition | | | | | |
|----------------------|--|-------|---|---|----------|
| Chemical Name | Identifiers | % | LD50/LC50 | Classifications According to Regulation/Directive | Comments |
| Petroleum Oil (mist) | CAS:64742-52-5 EC Number:265-155-0 EU Index:649-465-00-7 | < 70% | Ingestion/Oral-Rat LD50 • >5000 mg/kg Skin-Rabbit LD50 • >2000 mg/kg | EU DSD/DPD: Annex VI, Table 3.2: Carc. Cat. 2; R45 EU CLP: Annex VI, Table 3.1: Carc. 1B, H350 OSHA HCS 2012: Skin Irrit. 2 | NDA |

| | | | | | |
|----------------------------|--|-------|---|--|-----|
| Heptane | CAS: 142-82-5 EC Number: 205-563-8 EU Index: 601-008-00-2 | < 20% | Inhalation-Rat LC50• 103 g/m ³ 4 Hour(s) | EU DSD/DPD: Annex VI, Table 3.2: F; R11; Xn; R65; Xi; R38; R67; N; R50-53 EU CLP: Annex VI, Table 3.1: Flam. Liq. 2, H225; Asp. Tox. 1, H304; Skin Irrit. 2, H315; STOT SE 3: Narc., H336; Aquatic Acute 1, H400; Aquatic Chronic 1, H410 OSHA HCS 2012: Flam. Liq. 2; Skin Irrit. 2; Eye Irrit. 2; Asp. Tox. 1; STOT SE 3: Narc. | NDA |
| Coke (petroleum), calcined | CAS: 64743-05-1 EC Number: 265-210-9 | < 10% | NDA | EU DSD/DPD: Not Classified EU CLP: Not classified OSHA HCS 2012: Not classified | NDA |
| Acetone | CAS: 67-64-1 EC Number: 200-662-2 EU Index: 606-001-00-8 | < 10% | Ingestion/Oral-Rat LD50•5800mg/kg Inhalation-Rat LC50• 50100 mg/m ³ 8 Hour (s) | 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 |
| Propane | CAS: 74-98-6 EC Number: 200-827-9 EU Index: 601-003-00-5 | < 6% | 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 |
| Butane | CAS: 106-97-8 EC Number: 203-448-7 EU Index: 601-004-00-0 | < 6% | Inhalation-Rat LC50• 658 g/m ³ 4 Hour(s) | EU DSD/DPD: Annex VI, Table 3.2: F+; R12 EU CLP: Annex VI, Table 3.1: Flam. Gas 1, H220; Press. Gas - Comp., H280 OSHA HCS 2012: Flam. Gas 1; Press. Gas - Comp.; Simp. Asphyx.; | NDA |

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

Section 4 - First Aid Measures

4.1 Description of first aid measures

Inhalation

- Move person to fresh air. Administer oxygen if breathing is difficult. Give artificial respiration if victim is not breathing. If signs/symptoms continue, get medical attention.

Skin

- Wash skin with soap and water. Wash contaminated clothing before reuse. 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 | Ventilate enclosed areas. Do not walk through spilled material. Wear appropriate personal protective equipment, avoid direct contact. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.

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

6.2 Environmental precautions

| Prevent entry into waterways, sewers, basements or confined areas.

6.3 Methods and material for containment and cleaning up

Containment/Clean-up Measures | 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

| Exposure Limits/Guidelines | | | | |
|----------------------------|----------|--|---|--|
| | Result | ACGIH | NIOSH | OSHA |
| Propane (74-98-6) | TWAs | 1000 ppm TWA (listed under Aliphatic hydrocarbon gases: Alkane C1-4) | 1000 ppm TWA; 1800 mg/m ³ TWA | 1000 ppm TWA; 1800 mg/m ³ TWA |
| Butane (106-97-8) | STELs | 1000 ppm STEL | Not established | Not established |
| | TWAs | Not established | 800 ppm TWA; 1900 mg/m ³ TWA | Not established |
| Acetone (67-64-1) | TWAs | 500 ppm TWA | 250 ppm TWA; 590 mg/m ³ TWA | 1000 ppm TWA; 2400 mg/m ³ TWA |
| | STELs | 750 ppm STEL | Not established | Not established |
| Heptane (142-82-5) | TWAs | 400 ppm TWA (listed under Heptane, all isomers) | 85 ppm TWA; 350 mg/m ³ TWA | 500 ppm TWA; 2000 mg/m ³ TWA |
| | STELs | 500 ppm STEL (listed under Heptane, all isomers) | Not established | Not established |
| | Ceilings | Not established | 440 ppm Ceiling (15 min); 1800 mg/m ³ Ceiling (15 min) | 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. Follow best practice for site management and disposal of waste.

Key to abbreviations

ACGIH = American Conference of Governmental Industrial Hygiene

NIOSH = National Institute of Occupational Safety and Health

OSHA = Occupational Safety and Health Administration

STEL = Short Term Exposure Limits are based on 15-minute exposures

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

Section 9 - Physical and Chemical Properties

9.1 Information on Physical and Chemical Properties

| Material Description | | | |
|-------------------------------------|---------------|------------------------|--------------|
| Physical Form | Liquid | Appearance/Description | Aerosol |
| Color | Data lacking | Odor | Data lacking |
| Odor Threshold | Data lacking | | |
| General Properties | | | |
| Boiling Point | Data lacking | Melting Point | Data lacking |
| Decomposition Temperature | Data lacking | pH | Data lacking |
| Specific Gravity/Relative Density | Data lacking | Water Solubility | Negligible |
| 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 | Data lacking | UEL | Data lacking |
| LEL | Data lacking | Autoignition | Data lacking |
| Flammability (solid, gas) | Not relevant. | | |
| 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 | | |
|------------------------------------|------------|--|
| Petroleum Oil (mist) (< 70%) | 64742-52-5 | Irritation: Skin-Rabbit • 500 mg • Severe irritation |
| Coke (petroleum), calcined (< 10%) | 64743-05-1 | Acute Toxicity: Inhalation-Rat LC50 • >30.7 mg/m ³ 6 Hour(s) |

| | | |
|-----------------|----------|--|
| Heptane (< 20%) | 142-82-5 | Acute Toxicity: Inhalation-Rat LC50 • 103 g/m ³ 4 Hour(s) |
| Acetone (< 10%) | 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> |
| Butane (< 6%) | 106-97-8 | Acute Toxicity: Inhalation-Rat LC50 • 658 g/m ³ 4 Hour(s) |

| GHS Properties | Classification |
|-------------------------------|---|
| Acute toxicity | EU/CLP • Data lacking OSHA HCS 2012 • Data lacking |
| Aspiration Hazard | EU/CLP • Data lacking OSHA HCS 2012 • Data lacking |
| Carcinogenicity | EU/CLP • Data lacking OSHA HCS 2012 • Data lacking |
| Germ Cell Mutagenicity | EU/CLP • Data lacking OSHA HCS 2012 • Data lacking |
| Skin corrosion/Irritation | EU/CLP • Skin Irritation 2 OSHA HCS 2012 • Skin Irritation 2 |
| Skin sensitization | EU/CLP • Data lacking OSHA HCS 2012 • Data lacking |
| STOT-RE | EU/CLP • Data lacking OSHA HCS 2012 • Data lacking |
| STOT-SE | EU/CLP • Data lacking OSHA HCS 2012 • Data lacking |
| Toxicity for Reproduction | EU/CLP • Data lacking OSHA HCS 2012 • Data lacking |
| Respiratory sensitization | EU/CLP • Data lacking OSHA HCS 2012 • Data lacking |
| Serious eye damage/Irritation | EU/CLP • Data lacking OSHA HCS 2012 • Eye Irritation 2 |

Potential Health Effects

Inhalation

Acute (Immediate) | May cause irritation.

Chronic (Delayed) | No data available

Skin

Acute (Immediate) | Causes skin 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

Key to abbreviations

LC = Lethal Concentration
 LD = Lethal Dose
 TC = Toxic Concentration

Section 12 - Ecological Information**12.1 Toxicity**

Material data lacking.

12.2 Persistence and degradability

Material data lacking.

12.3 Bioaccumulative potential

Material data lacking.

12.4 Mobility in Soil

Material data lacking.

12.5 Results of PBT and vPvB assessment

No PBT and vPvB assessment has been conducted.

12.6 Other adverse effects

No studies have been found.

Section 13 - Disposal Considerations**13.1 Waste treatment methods****Product waste**

Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

Packaging waste

Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

Section 14 - Transport Information

| | 14.1 UN number | 14.2 UN proper shipping name | 14.3 Transport hazard class(es) | 14.4 Packing group | 14.5 Environmental hazards |
|-----------|----------------|------------------------------|---------------------------------|--------------------|----------------------------|
| DOT | NDA | Consumer Commodity, ORM-D | NDA | NDA | NDA |
| TDG | UN1950 | AEROSOLS, FLAMMABLE | 2.1 | NDA | NDA |
| IMO/IMDG | UN1950 | AEROSOLS, FLAMMABLE | 2.1 | NDA | NDA |
| IATA/ICAO | UN1950 | Aerosols, flammable | 2.1 | NDA | NDA |

14.6 Special precautions for user

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 |
| Butane | 106-97-8 | Yes | No | Yes | No |
| Coke (petroleum), calcined | 64743-05-1 | Yes | No | Yes | No |
| Heptane | 142-82-5 | Yes | No | Yes | No |
| Petroleum Oil (mist) | 64742-52-5 | Yes | No | Yes | No |
| Propane | 74-98-6 | Yes | No | Yes | No |

Canada

Labor

Canada - WHMIS - Classifications of Substances

| | | |
|------------------------------|------------|------------|
| • Acetone | 67-64-1 | B2, D2B |
| • Petroleum Oil (mist) | 64742-52-5 | Not Listed |
| • Heptane | 142-82-5 | B2, D2B |
| • Propane | 74-98-6 | A, B1 |
| • Butane | 106-97-8 | A, B1 |
| • Coke (petroleum), calcined | 64743-05-1 | Not Listed |

Canada - WHMIS - Ingredient Disclosure List

| | | |
|------------------------------|------------|------------|
| • Acetone | 67-64-1 | 1 % |
| • Petroleum Oil (mist) | 64742-52-5 | Not Listed |
| • Heptane | 142-82-5 | 1 % |
| • Propane | 74-98-6 | Not Listed |
| • Butane | 106-97-8 | 1 % |
| • Coke (petroleum), calcined | 64743-05-1 | Not Listed |

Environment

Canada - CEPA - Priority Substances List

| | | |
|------------------------------|------------|------------|
| • Acetone | 67-64-1 | Not Listed |
| • Petroleum Oil (mist) | 64742-52-5 | Not Listed |
| • Heptane | 142-82-5 | Not Listed |
| • Propane | 74-98-6 | Not Listed |
| • Butane | 106-97-8 | Not Listed |
| • Coke (petroleum), calcined | 64743-05-1 | Not Listed |

Europe

Other

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

| | | |
|------------------------------|------------|------------|
| • Acetone | 67-64-1 | Not Listed |
| • Petroleum Oil (mist) | 64742-52-5 | Not Listed |
| • Heptane | 142-82-5 | Not Listed |
| • Propane | 74-98-6 | Not Listed |
| • Butane | 106-97-8 | Not Listed |
| • Coke (petroleum), calcined | 64743-05-1 | Not Listed |

Japan

Environment

Inventory - Japan - Industrial Safety and Health Law Substances (ISHL)

| | | |
|------------------------------|------------|------------|
| • Acetone | 67-64-1 | Not Listed |
| • Petroleum Oil (mist) | 64742-52-5 | Not Listed |
| • Heptane | 142-82-5 | Not Listed |
| • Propane | 74-98-6 | Not Listed |
| • Butane | 106-97-8 | Not Listed |
| • Coke (petroleum), calcined | 64743-05-1 | Not Listed |

Other

Japan - Chemical Substance Control Law (CSCL) - Monitoring Chemical Substances

| | | |
|------------------------------|------------|------------|
| • Acetone | 67-64-1 | Not Listed |
| • Petroleum Oil (mist) | 64742-52-5 | Not Listed |
| • Heptane | 142-82-5 | Not Listed |
| • Propane | 74-98-6 | Not Listed |
| • Butane | 106-97-8 | Not Listed |
| • Coke (petroleum), calcined | 64743-05-1 | Not Listed |

Japan - Poisonous and Deleterious Substances - Substances Not Considered Deleterious

| | | |
|------------------------------|------------|------------|
| • Acetone | 67-64-1 | Not Listed |
| • Petroleum Oil (mist) | 64742-52-5 | Not Listed |
| • Heptane | 142-82-5 | Not Listed |
| • Propane | 74-98-6 | Not Listed |
| • Butane | 106-97-8 | Not Listed |
| • Coke (petroleum), calcined | 64743-05-1 | Not Listed |

Japan - Poisonous and Deleterious Substances - Substances Not Considered Poisonous

| | | |
|------------------------------|------------|------------|
| • Acetone | 67-64-1 | Not Listed |
| • Petroleum Oil (mist) | 64742-52-5 | Not Listed |
| • Heptane | 142-82-5 | Not Listed |
| • Propane | 74-98-6 | Not Listed |
| • Butane | 106-97-8 | Not Listed |
| • Coke (petroleum), calcined | 64743-05-1 | Not Listed |

United States

Labor

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

| | | |
|------------------------------|------------|------------|
| • Acetone | 67-64-1 | Not Listed |
| • Petroleum Oil (mist) | 64742-52-5 | Not Listed |
| • Heptane | 142-82-5 | Not Listed |
| • Propane | 74-98-6 | Not Listed |
| • Butane | 106-97-8 | Not Listed |
| • Coke (petroleum), calcined | 64743-05-1 | Not Listed |

U.S. - OSHA - Specifically Regulated Chemicals

| | | |
|------------------------------|------------|------------|
| • Acetone | 67-64-1 | Not Listed |
| • Petroleum Oil (mist) | 64742-52-5 | Not Listed |
| • Heptane | 142-82-5 | Not Listed |
| • Propane | 74-98-6 | Not Listed |
| • Butane | 106-97-8 | Not Listed |
| • Coke (petroleum), calcined | 64743-05-1 | Not Listed |

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

| | | |
|------------------------------|------------|------------|
| • Acetone | 67-64-1 | Not Listed |
| • Petroleum Oil (mist) | 64742-52-5 | Not Listed |
| • Heptane | 142-82-5 | Not Listed |
| • Propane | 74-98-6 | Not Listed |
| • Butane | 106-97-8 | Not Listed |
| • Coke (petroleum), calcined | 64743-05-1 | Not Listed |

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

| | | |
|------------------------------|------------|------------------------------------|
| • Acetone | 67-64-1 | 5000 lb final RQ; 2270 kg final RQ |
| • Petroleum Oil (mist) | 64742-52-5 | Not Listed |
| • Heptane | 142-82-5 | Not Listed |
| • Propane | 74-98-6 | Not Listed |
| • Butane | 106-97-8 | Not Listed |
| • Coke (petroleum), calcined | 64743-05-1 | Not Listed |

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

| | | |
|------------------------------|------------|------------|
| • Acetone | 67-64-1 | Not Listed |
| • Petroleum Oil (mist) | 64742-52-5 | Not Listed |
| • Heptane | 142-82-5 | Not Listed |
| • Propane | 74-98-6 | Not Listed |
| • Butane | 106-97-8 | Not Listed |
| • Coke (petroleum), calcined | 64743-05-1 | Not Listed |

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

| | | |
|------------------------------|------------|------------|
| • Acetone | 67-64-1 | Not Listed |
| • Petroleum Oil (mist) | 64742-52-5 | Not Listed |
| • Heptane | 142-82-5 | Not Listed |
| • Propane | 74-98-6 | Not Listed |
| • Butane | 106-97-8 | Not Listed |
| • Coke (petroleum), calcined | 64743-05-1 | Not Listed |

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

| | | |
|------------------------------|------------|------------|
| • Acetone | 67-64-1 | Not Listed |
| • Petroleum Oil (mist) | 64742-52-5 | Not Listed |
| • Heptane | 142-82-5 | Not Listed |
| • Propane | 74-98-6 | Not Listed |
| • Butane | 106-97-8 | Not Listed |
| • Coke (petroleum), calcined | 64743-05-1 | Not Listed |

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

| | | |
|------------------------------|------------|------------|
| • Acetone | 67-64-1 | Not Listed |
| • Petroleum Oil (mist) | 64742-52-5 | Not Listed |
| • Heptane | 142-82-5 | Not Listed |
| • Propane | 74-98-6 | Not Listed |
| • Butane | 106-97-8 | Not Listed |
| • Coke (petroleum), calcined | 64743-05-1 | Not Listed |

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

| | | |
|------------------------|------------|------------|
| • Acetone | 67-64-1 | Not Listed |
| • Petroleum Oil (mist) | 64742-52-5 | Not Listed |

| | | |
|------------------------------|------------|------------|
| • Heptane | 142-82-5 | Not Listed |
| • Propane | 74-98-6 | Not Listed |
| • Butane | 106-97-8 | Not Listed |
| • Coke (petroleum), calcined | 64743-05-1 | Not Listed |

United States - California

Environment

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

| | | |
|------------------------------|------------|------------|
| • Acetone | 67-64-1 | Not Listed |
| • Petroleum Oil (mist) | 64742-52-5 | Not Listed |
| • Heptane | 142-82-5 | Not Listed |
| • Propane | 74-98-6 | Not Listed |
| • Butane | 106-97-8 | Not Listed |
| • Coke (petroleum), calcined | 64743-05-1 | Not Listed |

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

| | | |
|------------------------------|------------|------------|
| • Acetone | 67-64-1 | Not Listed |
| • Petroleum Oil (mist) | 64742-52-5 | Not Listed |
| • Heptane | 142-82-5 | Not Listed |
| • Propane | 74-98-6 | Not Listed |
| • Butane | 106-97-8 | Not Listed |
| • Coke (petroleum), calcined | 64743-05-1 | Not Listed |

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

| | | |
|------------------------------|------------|------------|
| • Acetone | 67-64-1 | Not Listed |
| • Petroleum Oil (mist) | 64742-52-5 | Not Listed |
| • Heptane | 142-82-5 | Not Listed |
| • Propane | 74-98-6 | Not Listed |
| • Butane | 106-97-8 | Not Listed |
| • Coke (petroleum), calcined | 64743-05-1 | Not Listed |

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

| | | |
|------------------------------|------------|------------|
| • Acetone | 67-64-1 | Not Listed |
| • Petroleum Oil (mist) | 64742-52-5 | Not Listed |
| • Heptane | 142-82-5 | Not Listed |
| • Propane | 74-98-6 | Not Listed |
| • Butane | 106-97-8 | Not Listed |
| • Coke (petroleum), calcined | 64743-05-1 | Not Listed |

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

| | | |
|------------------------------|------------|------------|
| • Acetone | 67-64-1 | Not Listed |
| • Petroleum Oil (mist) | 64742-52-5 | Not Listed |
| • Heptane | 142-82-5 | Not Listed |
| • Propane | 74-98-6 | Not Listed |
| • Butane | 106-97-8 | Not Listed |
| • Coke (petroleum), calcined | 64743-05-1 | Not Listed |

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

| | | |
|------------------------------|------------|------------|
| • Acetone | 67-64-1 | Not Listed |
| • Petroleum Oil (mist) | 64742-52-5 | Not Listed |
| • Heptane | 142-82-5 | Not Listed |
| • Propane | 74-98-6 | Not Listed |
| • Butane | 106-97-8 | Not Listed |
| • Coke (petroleum), calcined | 64743-05-1 | Not Listed |

15.2 Chemical Safety Assessment

| No Chemical Safety Assessment has been carried out.

Section 16-Other Information

Relevant Phrases (code & full text)

| H220 - Extremely flammable gas
 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
 H319 - Causes serious eye irritation
 H336 - May cause drowsiness or dizziness
 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
 R11 - Highly flammable.
 R36 - Irritating to eyes.
 R45 - May cause cancer.
 R48/20 - Harmful: danger of serious damage to health by prolonged exposure through inhalation.
 R50 - Very toxic to aquatic organisms.
 R65 - Harmful: may cause lung damage if swallowed.
 R67 - Vapours may cause drowsiness and dizziness.

Last Revision Date | 25/March/2015

Preparation Date | 25/March/2015

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