

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

Product Code |

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: 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 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



Hazard statements | H225 - Highly flammable liquid and vapour
 H304 - May be fatal if swallowed and enters airways
 H315 - Causes skin irritation
 H361d - Suspected of damaging the unborn child.
 H411 - Toxic to aquatic life with long lasting effects

Precautionary statements

Prevention | P201 - Obtain special instructions before use.
 P202 - Do not handle until all safety precautions have been read and understood.
 P210 - Keep away from heat, sparks, open flames and/or hot surfaces. - No smoking.
 P233 - Keep container tightly closed.
 P240 - Ground and/or bond container and receiving equipment.
 P241 - Use explosion-proof electrical/ventilating/lighting/equipment.
 P242 - Use only non-sparking tools.
 P243 - Take precautionary measures against static discharge.
 P264 - Wash thoroughly after handling.
 P273 - Avoid release to the environment.
 P280 - Wear protective gloves and eye/face protection , .
 P281 - Use personal protective equipment as required.

Response | P370+P378 - In case of fire: Use appropriate media for extinction.
 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.
 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 | R11 - Highly flammable.
 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
 S16 - Keep away from sources of ignition - No Smoking.
 S37 - Wear suitable gloves.
 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 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. - No smoking.
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.
Wash thoroughly after handling.
Wear protective gloves - and eye/face protection..

Response | 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.

Storage/Disposal | 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 | 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 Liquids - B2
Other Toxic Effects - D2A

2.2 Label elements

WHMIS



Flammable Liquids - B2
Other Toxic Effects - D2A

2.3 Other hazards

WHMIS

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

Section 3-Composition/Information on Ingredients

3.1 Substances

Material does not meet the criteria of a substance in accordance with Regulation (EC) No 1272/2008.

3.2 Mixtures

Composition					
Chemical Name	Identifiers	%	LD50/LC50	Classifications According to Regulation/Directive	Comments
Naphtha (petroleum), hydrotreated light	CAS: 64742-49-0 EC Number: 265-151-9 EU Index: 649-328-00-1	< 55%	NDA	EU DSD/DPD: Annex VI, Table 3.2: Carc.Cat.2 R45 Muta.Cat.2 R46 Xn R65 EU CLP: Annex VI, Table 3.1: Carc. 1B, H350; Muta. 1B, H340; Asp. Tox. 1, H304 OSHA HCS 2012: Not Classified	Contains <0.1% Benzene therefore carcinogen and mutagen classifications do not apply
Graphite	CAS: 7782-42-5 EC Number: 231-955-3	< 25%	NDA	EU DSD/DPD: Not Classified EU CLP: Not Classified OSHA HCS 2012: Comb. Dust	NDA
Heptane	CAS: 142-82-5 EC Number: 205-563-8 EU Index: 601-008-00-2	6%	Inhalation-Rat LC50 • 103 g/m ³ 4 Hour(s)	EU DSD/DPD: Annex VI, Table 3.2: F R11 Xi R38 N R50-53 Xn R65 R67 EU CLP: Annex VI, Table 3.1: Flam. Liq. 2, H225; Asp. Tox. 1, H304; Skin Irrit. 2, H315; STOT SE 3: Narc., H336; Aquatic Acute 1, H400; Aquatic Chronic 1, H410 OSHA HCS 2012: Flam. Liq. 2; Skin Irrit. 2; Eye Irrit. 2; Asp. Tox. 1; STOT SE 3: Narc.	NDA
Toluene	CAS: 108-88-3 EC Number: 203-625-9 EU Index: 601-021-00-3	5%	Ingestion/Oral-Rat LD50 • 636 mg/kg Inhalation-Rat LC50 • 49 g/m ³ 4 Hour(s) Skin-Rabbit LD50 • 14100 µL/kg	EU DSD/DPD: Annex VI, Table 3.2: F R11 Xi R38 Xn R48/20-65 Repr.Cat.3 R63 R67 EU CLP: Annex VI, Table 3.1: Flam. Liq. 2, H225; Skin Irrit. 2, H315; Repr. 2, H361d; STOT SE 3: Narc., H336; STOT RE 2, H373; Asp. Tox. 1, H304 OSHA HCS 2012: Flam. Liq. 2; Acute Tox. 4 (oral); Skin Irrit. 2; Eye Irrit. 2; Muta. 1B; Repr. 2; STOT SE 3: Narc.; STOT RE 1 (CNS, Inhl); Asp. Tox. 1	NDA
Quartz	CAS: 14808-60-7 EC Number: 238-878-4	< 1%	NDA	EU DSD/DPD: Self Classified: T R48/20 Carc. Cat. 1 R49 EU CLP: Self Classified: STOT RE 1 (Lungs, Inhl), H372; Carc. 1A, H350 OSHA HCS 2012: STOT RE 1 (Lungs, Inhl); Carc. 1A	NDA

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

Section 4-First Aid Measures

4.1 Description of first aid measures

- Inhalation** | IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. 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

- Suitable Extinguishing Media** | LARGE FIRES: Water spray, fog or alcohol-resistant foam.
SMALL FIRES: Dry chemical, CO₂, water spray or alcohol-resistant foam.

- Unsuitable Extinguishing Media** | No data available

5.2 Special hazards arising from the substance or mixture

- Unusual Fire and Explosion Hazards** | Containers may explode when heated.
Vapor explosion hazard indoors, outdoors or in sewers.
HIGHLY FLAMMABLE: Will be easily ignited by heat, sparks or flames.
Many liquids are lighter than water.
Most vapors are heavier than air. They will spread along ground and collect in low or confined areas (sewers, basements, tanks).
Runoff to sewer may create fire or explosion hazard.
Vapors may form explosive mixtures with air.
Vapors may travel to source of ignition and flash back.

- Hazardous Combustion Products** | No data available

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

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: Dike 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

Exposure Limits/Guidelines					
	Result	ACGIH	Europe	NIOSH	OSHA
Quartz (14808-60-7)	TWAs	0.025 mg/m ³ TWA (respirable fraction)	Not established	0.05 mg/m ³ TWA (respirable dust)	Not established
	STELs	Not established	100 ppm STEL; 384 mg/m ³ STEL	150 ppm STEL; 560 mg/m ³ STEL	Not established

Toluene (108-88-3)	TWAs	20 ppm TWA	50 ppm TWA; 192 mg/m3 TWA	100 ppm TWA; 375 mg/m3 TWA	200 ppm TWA
	Ceilings	Not established	Not established	Not established	300 ppm Ceiling
Heptane (142-82-5)	TWAs	400 ppm TWA (listed under Heptane, all isomers)	Not established	85 ppm TWA; 350 mg/m3 TWA	500 ppm TWA; 2000 mg/m3 TWA
	STELs	500 ppm STEL (listed under Heptane, all isomers)	Not established	Not established	Not established
	Ceilings	Not established	Not established	440 ppm Ceiling (15 min); 1800 mg/m3 Ceiling (15 min)	Not established
Graphite (7782-42-5)	TWAs	2 mg/m3 TWA (all forms except graphite fibers, respirable fraction)	Not established	2.5 mg/m3 TWA (natural, respirable dust)	15 mg/m3 TWA (synthetic, total dust); 5 mg/m3 TWA (synthetic, respirable fraction)

8.2 Exposure controls

Engineering Measures/Controls

- Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Personal Protective Equipment

Respiratory

- Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or symptoms are experienced.

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			
Physical Form	Liquid	Appearance/Description	Dark gray liquid with a naphtha odor.
Color	Dark gray.	Odor	Naphtha
Odor Threshold	Data lacking		
General Properties			
Boiling Point	212 to 300 F(100 to 148.8889 C)	Melting Point	Data lacking
Decomposition Temperature	Data lacking	pH	Data lacking
Specific Gravity/Relative Density	= 0.93	Water Solubility	Slightly Soluble
Viscosity	1700 Centipoise (cPs, cP) or mPas	Explosive Properties	Data lacking
Oxidizing Properties:	Data lacking		
Volatility			
Vapor Pressure	18 mmHg (torr) @ 68 F(20 C)	Vapor Density	4.1 Air=1

Evaporation Rate	1 n-Butyl Acetate = 1		
Flammability			
Flash Point	18 F(-7.7778 C) TCC (Tagliabue Closed Cup) (Heptane)	UEL	7 %
LEL	0.9 %	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 under normal temperatures and pressures.

10.3 Possibility of hazardous reactions

| Hazardous polymerization will not occur.

10.4 Conditions to avoid

| Heat, sparks, open flames. Excess heat. Incompatible materials.

10.5 Incompatible materials

| Strong oxidizing agents, acids, and alkalis.

10.6 Hazardous decomposition products

| On burning may release carbon dioxide and carbon monoxide.

Section 11: Toxicological Information

11.1 Information on toxicological effects

Components		
Quartz (< 1%)	14808-60-7	Tumorigen / Carcinogen: Inhalation-Rat TClO • 50 mg/m ³ 6 Hour(s) 71 Week(s)-Intermittent; <i>Tumorigenic: Carcinogenic by RTECS criteria; Liver: Tumors</i>
Toluene (5%)	108-88-3	Acute Toxicity: Ingestion/Oral-Rat LD50 • 636 mg/kg; Inhalation-Rat LC50 • 49 g/m ³ 4 Hour(s); Inhalation-Human TClO • 200 ppm; <i>Brain and Coverings: Recordings from specific areas of CNS; Behavioral: Antipsychotic; Blood: Changes in bone marrow not included above;</i> Inhalation-Human TClO • 1500 mg/m ³ 8 Hour(s); <i>Sense Organs and Special Senses: Eye: Lacrimation; Sense Organs and Special Senses: Eye: Conjunctive irritation; Behavioral: Ataxia;</i> Inhalation-Man TClO • 50 ppm; <i>Kidney, Ureter, and Bladder: Other changes in urine composition;</i> Skin-Rabbit LD50 • 14100 µL/kg; Irritation: Eye-Rabbit • 2 mg 24 Hour(s) • Severe irritation; Skin-Rabbit • 20 mg 24 Hour(s) • Moderate irritation; Multi-dose Toxicity: Inhalation-Mouse TClO • 250 ppm 4 Day(s)-Continuous; <i>Behavioral: Convulsions or effect on seizure threshold; Behavioral: Abuse;</i> Inhalation-Mouse TClO • 50 ppm 12 Week(s)-Intermittent; <i>Brain and Coverings: Other degenerative changes;</i> Inhalation-Rat TClO • 10 ppm 6 Hour(s) 13 Week(s)-Intermittent; <i>Brain and Coverings: Other degenerative changes; Biochemical: Enzyme inhibition, induction, or change in blood or tissue levels: Multiple enzyme effects;</i> Mutagen: Micronucleus test • Ingestion/Oral-Mouse • 200 mg/kg; Sister chromatid exchange • Inhalation-Human • 252 µg/L 19 Year(s); Cytogenetic analysis • Inhalation-Rat • 5400 µg/m ³ 16 Week(s)-Intermittent; Reproductive: Inhalation-Mouse TClO • 500 mg/m ³ 24 Hour(s)(6-13D preg); <i>Reproductive Effects: Effects on Embryo or Fetus: Fetotoxicity (except death, e.g., stunted fetus);</i> Inhalation-Mouse TClO • 200 ppm 7 Hour(s)(7-16D preg);

		<i>Reproductive Effects: Specific Developmental Abnormalities: Urogenital system</i>
Heptane (6%)	142-82-5	Acute Toxicity: Inhalation-Rat LC50 • 103 g/m ³ 4 Hour(s)

GHS Properties	Classification
Acute toxicity	EU/CLP • Data lacking OSHA HCS 2012 • Data lacking
Aspiration Hazard	EU/CLP • Aspiration 1 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 • Toxic to Reproduction 2 OSHA HCS 2012 • Toxic to Reproduction 2
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)** | 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.

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

Reproductive Effects | Animal tests show that Toluene possibly causes toxicity to human reproduction or development.

Key to abbreviations

LC = Lethal Concentration

TC = Toxic Concentration

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

	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	UN1993	Flammable liquid, n.o.s. (contains naphtha & heptane solution)	3	II	NDA
TDG	UN1993	FLAMMABLE LIQUID, N.O.S. (contains naphtha & heptane solution)	3	II	Potential Marine Pollutant
IMO/IMDG	UN1993	FLAMMABLE LIQUID, N.O.S. (contains naphtha & heptane solution)	3	II	NDA
IATA/ICAO	UN1993	Flammable liquid, n.o.s. (contains naphtha & heptane solution)	3	II	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

Inventory					
Component	CAS	Canada DSL	Canada NDSL	EU EINECS	EU ELNICS
Graphite	7782-42-5	Yes	No	Yes	No
Heptane	142-82-5	Yes	No	Yes	No
Naphtha (petroleum), hydrotreated light	64742-49-0	Yes	No	Yes	No
Quartz	14808-60-7	Yes	No	Yes	No
Toluene	108-88-3	Yes	No	Yes	No

Canada

Labor

Canada - WHMIS - Classifications of Substances

• Naphtha (petroleum), hydrotreated light	64742-49-0	Not Listed
• Heptane	142-82-5	B2, D2B
• Toluene	108-88-3	B2, D2A, D2B
		D2A (In certain cases, this classification does not apply. For more information, consult the section Substance Specific Issues - Silica, crystalline, encapsulated on Health Canada's WHMIS Division website.)
• Quartz	14808-60-7	
• Graphite	7782-42-5	D2A (natural); D2B (synthetic)

Canada - WHMIS - Ingredient Disclosure List

• Naphtha (petroleum), hydrotreated light	64742-49-0	Not Listed
• Heptane	142-82-5	1 %
• Toluene	108-88-3	1 %
• Quartz	14808-60-7	1 %
• Graphite	7782-42-5	Not Listed

Environment

Canada - CEPA - Priority Substances List

• Naphtha (petroleum), hydrotreated light	64742-49-0	Not Listed
• Heptane	142-82-5	Not Listed
• Toluene	108-88-3	Priority Substance List 1 (substance not considered toxic)

• Quartz	14808-60-7	Not Listed
• Graphite	7782-42-5	Not Listed

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

U.S. - OSHA - Specifically Regulated 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

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

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

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

• Naphtha (petroleum), hydrotreated light	64742-49-0	Not Listed
• Heptane	142-82-5	Not Listed
• Toluene	108-88-3	1000 lb final RQ; 454 kg final RQ
• Quartz	14808-60-7	Not Listed
• Graphite	7782-42-5	Not Listed

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

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

• 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. - CERCLA/SARA - Section 302 Extremely Hazardous Substances TPQs

• 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. - CERCLA/SARA - Section 313 - Emission Reporting

• Naphtha (petroleum), hydrotreated light	64742-49-0	Not Listed
• Heptane	142-82-5	Not Listed
• Toluene	108-88-3	1.0 % de minimis concentration
• Quartz	14808-60-7	Not Listed
• Graphite	7782-42-5	Not Listed

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

• Naphtha (petroleum), hydrotreated light	64742-49-0	Not Listed
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• 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 - California

Environment

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

• 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	carcinogen, initial date 10/1/88 (airborne particles of respirable size)
• 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
• Toluene	108-88-3	developmental toxicity, initial date 1/1/91
• 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

| 27/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