Safety Data Sheet

Section1:IdentificationoftheSubstance/MixtureandoftheCompany/Undertaking

1.1 Product identifier

Product Name | **Superflake(TM) Cold Oven Chain Lubricant**

Product Code | 45592, 45593

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

Relevant identified use(s) | 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 - (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)

Section2:HazardsIdentification

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 | Aspiration 1 - H304

DSD/DPD | Harmful (Xn)
R65

2.2 Label Elements

CLP

DANGER

Hazard statements | H304 - May be fatal if swallowed and enters airways

Precautionary statements

Response | P301+P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

P331 - Do NOT induce vomiting.

Storage/Disposal | 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 | R65 - Harmful: may cause lung damage if swallowed.

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 4
Aspiration 1

2.2 Label elements

OSHA HCS 2012

DANGER

Hazard statements | Combustible liquid
May be fatal if swallowed and enters airways

Precautionary statements

Prevention | Keep away from heat, sparks, open flames and/or hot surfaces. - No smoking.

Response | In case of fire: Use appropriate media for extinction.
IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
Do NOT induce vomiting.

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 | Combustible Liquids - B3

2.2 Label elements

WHMIS

- Combustible Liquids - B3

2.3 Other hazards

WHMIS

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

Section3-Composition/InformationonIngredients

3.1 Substances

- Materialdoesnotmeetthecriteriaofasubstance.

3.2 Mixtures

Composition					
Chemical Name	**Identifiers**	**%**	**LD50/LC50**	**Classifications According to Regulation/Directive**	**Comments**
Distillates (petroleum), hydrotreated light	**CAS:**64742-47-8 **EC Number:**265-149-8 **EU Index:**649-422-00-2	> 75%	NDA	**EU DSD/DPD:** Annex VI, Table 3.2: Xn; R65 **EU CLP:** Annex VI, Table 3.1: Asp. Tox. 1, H304 **OSHA HCS 2012:** Flam. Liq. 4; Asp. Tox. 1	NDA
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
Quartz	**CAS:**14808-60-7 **EC Number:**238-878-4	< 1%	NDA	**EU DSD/DPD:** Carcinogen 1; R49 **EU CLP:** STOT RE 1 (Lungs, Inhl), H372; Carc. 1A, H350 **OSHA HCS 2012:** STOT RE 1 (Lungs, Inhl); Carc. 1A	Less than 0.1% is respirable

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

Section4-FirstAidMeasures

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 contact with substance, immediately flush skin with running water for at least 20 minutes. Wash skin with soap and water. Remove clothing and wash thoroughly before use.

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

- DoNOTinduce vomiting. Getmedical 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.

Section5-FirefightingMeasures

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

Avoid concentrated water jet, which may propagate fire.

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.

Section6-AccidentalReleaseMeasures

6.1 Personal precautions, protective equipment and emergency procedures

Personal Precautions

Ensure adequate ventilation to remove vapors, fumes, dust etc. 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. 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.

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

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

Use only in well ventilated areas. 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. Wear appropriate personal protective equipment, avoid direct contact. Avoid breathing mist, vapours and/or 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

Keep container tightly closed. Store in a cool, dry, well-ventilated place. Keep away from heat, sparks, and flame.

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**
Quartz (14808-60-7)	TWAs	0.025 mg/m3 TWA (respirable fraction)	0.05 mg/m3 TWA (respirable dust)	Not established
Graphite (7782-42-5)	TWAs	2 mg/m3 TWA (all forms except graphite fibers, respirable fraction)	2.5 mg/m3 TWA (natural, respirable dust)	15 mg/m3 TWA (synthetic, total dust); 5 mg/m3 TWA (synthetic, respirable fraction)

Exposure Limits Supplemental

OSHA

•Graphite (7782-42-5): **Mineral Dusts:** (15 mppcf TWA (natural))

•Quartz (14808-60-7): **Mineral Dusts:** ((30)/(%SiO2 + 2) mg/m3 TWA, total dust; (250)/(%SiO2 + 5) mppcf TWA, respirable fraction; (10)/(%SiO2 + 2) mg/m3 TWA, 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	ı Wear protective clothing and gloves.
Environmental Exposure Controls	ı 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

Section9-PhysicalandChemicalProperties

9.1 Information on Physical and Chemical Properties

Material Description			
Physical Form	Liquid	Appearance/Description	Gray/black liquid with a hydrocarbon odor.
Color	Gray/black	Odor	Hydrocarbon
Odor Threshold	Data lacking		
General Properties			
Boiling Point	379 to 412 F(192.7778 to 211.1111 C)	Melting Point	Data lacking
Decomposition Temperature	Data lacking	pH	Data lacking
Specific Gravity/Relative Density	= 0.913	Water Solubility	Negligible
Viscosity	Data lacking	Explosive Properties	Data lacking
Oxidizing Properties:	Data lacking		
Volatility			
Vapor Pressure	0.36 mmHg (torr) @ 20 C(68 F)	Vapor Density	6.3 Air=1
Evaporation Rate	Negligible		
Flammability			
Flash Point	148 F(64.4444 C) TCC (Tagliabue Closed Cup)	UEL	7 %
LEL	0.7 %	Autoignition	Data lacking
Flammability (solid, gas)	Data lacking		
Environmental			
Octanol/Water Partition coefficient	Data lacking		

9.2 Other Information

ı No additional physical and chemical parameters noted.

Section10:StabilityandReactivity

10.1 Reactivity

ı No dangerous reaction known under conditions of normal use.

10.2 Chemical stability

ı Stable under normal temperatures and pressures.

10.3 Possibility of hazardous reactions

ı 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.

Section11-ToxicologicalInformation

11.1 Information on toxicological effects

Components		
Quartz (< 1%)	14808-60-7	**Multi-dose Toxicity:** Inhalation-Hamster TCLo • 3 mg/m³ 6 Hour(s) 78 Week(s)-Intermittent; *Lungs, Thorax, or Respiration*:**Fibrosis (interstitial)**; *Lungs, Thorax, or Respiration*:**Changes in lung weight**; Inhalation-Rat TCLo • 80 mg/m³ 26 Week(s)-Intermittent; *Lungs, Thorax, or Respiration*:**Fibrosis, focal (pneumoconiosis)**; *Blood*:**Changes in spleen**; *Immunological Including Allergic*:**Decrease in cellular immune response**; **Tumorigen / Carcinogen:** Inhalation-Rat TCLo • 50 mg/m³ 6 Hour(s) 71 Week(s)-Intermittent; *Tumorigenic*:**Carcinogenic by RTECS criteria**; *Liver*:**Tumors**

GHS Properties	Classification
Acute toxicity	**EU/CLP** • Data lacking **OSHA HCS 2012** • Data lacking
Aspiration Hazard	**EU/CLP** • Aspiration 1 **OSHA HCS 2012** • Aspiration 1
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** • Data lacking **OSHA HCS 2012** • Data lacking
Skin sensitization	**EU/CLP** • Data lacking **OSHA HCS 2012** • Data lacking
STOT-RE	**EU/CLP** • Data lacking **OSHA HCS 2012** • 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** • Data lacking

Potential Health Effects

Inhalation

Acute (Immediate) | May cause irritation.

Chronic (Delayed) No data available

Skin

Acute (Immediate) May cause irritation.

Chronic (Delayed) No data available

Eye

Acute (Immediate) May cause irritation.

Chronic (Delayed) No data available

Ingestion

Acute (Immediate) 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			
	CAS	IARC	NTP
Quartz	14808-60-7	Group 1-Carcinogenic	Known Human Carcinogen

Key to abbreviations

TC = Toxic Concentration

Section12-EcologicalInformation

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

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

12.6 Other adverse effects

No studies have been found.

Section13-DisposalConsiderations

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.

Section14-TransportInformation

	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	Not Regulated	NDA	NDA	NDA
TDG	NDA	Not Regulated	NDA	NDA	NDA
IMO/IMDG	NDA	Not Regulated	NDA	NDA	NDA
IATA/ICAO	NDA	Not Regulated	NDA	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, Fire

Inventory					
Component	**CAS**	**Canada DSL**	**Canada NDSL**	**EU EINECS**	**EU ELNICS**
Distillates (petroleum), hydrotreated light	64742-47-8	Yes	No	Yes	No
Graphite	7782-42-5	Yes	No	Yes	No
Quartz	14808-60-7	Yes	No	Yes	No

Canada

Labor

Canada - WHMIS - Classifications of Substances

• Distillates (petroleum), hydrotreated light	64742-47-8	Not Listed
• Quartz	14808-60-7	D2A (In certain cases, this classification does not apply. For more information, consult the section Substance Specific Issues - Silica, crystalline, encapsulated on Health Canada's WHMIS Division website.)
• Graphite	7782-42-5	D2A (natural); D2B (synthetic)

Canada - WHMIS - Ingredient Disclosure List

• Distillates (petroleum), hydrotreated light	64742-47-8	Not Listed
• Quartz	14808-60-7	1 %
• Graphite	7782-42-5	Not Listed

Environment

Canada - CEPA - Priority Substances List

• Distillates (petroleum), hydrotreated light	64742-47-8	Not Listed
• 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)

• Distillates (petroleum), hydrotreated light	64742-47-8	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)

• Distillates (petroleum), hydrotreated light	64742-47-8	Not Listed
• Quartz	14808-60-7	Not Listed
• Graphite	7782-42-5	Not Listed

Other

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

• Distillates (petroleum), hydrotreated light	64742-47-8	Not Listed
• Quartz	14808-60-7	Not Listed
• Graphite	7782-42-5	Not Listed

Japan - Poisonous and Deleterious Substances - Substances Not Considered Deleterious

• Distillates (petroleum), hydrotreated light	64742-47-8	Not Listed
• Quartz	14808-60-7	Not Listed
• Graphite	7782-42-5	Not Listed

Japan - Poisonous and Deleterious Substances - Substances Not Considered Poisonous

• Distillates (petroleum), hydrotreated light	64742-47-8	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

• Distillates (petroleum), hydrotreated light	64742-47-8	Not Listed
• Quartz	14808-60-7	Not Listed
• Graphite	7782-42-5	Not Listed

U.S. - OSHA - Specifically Regulated Chemicals

• Distillates (petroleum), hydrotreated light	64742-47-8	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

• Distillates (petroleum), hydrotreated light	64742-47-8	Not Listed
• Quartz	14808-60-7	Not Listed
• Graphite	7782-42-5	Not Listed

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

• Distillates (petroleum), hydrotreated light	64742-47-8	Not Listed
• Quartz	14808-60-7	Not Listed
• Graphite	7782-42-5	Not Listed

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

• Distillates (petroleum), hydrotreated light	64742-47-8	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

• Distillates (petroleum), hydrotreated light	64742-47-8	Not Listed
• Quartz	14808-60-7	Not Listed
• Graphite	7782-42-5	Not Listed

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

• Distillates (petroleum), hydrotreated light	64742-47-8	Not Listed
• Quartz	14808-60-7	Not Listed
• Graphite	7782-42-5	Not Listed

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

• Distillates (petroleum), hydrotreated light	64742-47-8	Not Listed
• Quartz	14808-60-7	Not Listed
• Graphite	7782-42-5	Not Listed

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

• Distillates (petroleum), hydrotreated light	64742-47-8	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

• Distillates (petroleum), hydrotreated light	64742-47-8	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

• Distillates (petroleum), hydrotreated light	64742-47-8	Not Listed
• Quartz	14808-60-7	Not Listed
• Graphite	7782-42-5	Not Listed

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

• Distillates (petroleum), hydrotreated light	64742-47-8	Not Listed
• Quartz	14808-60-7	Not Listed
• Graphite	7782-42-5	Not Listed

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

• Distillates (petroleum), hydrotreated light	64742-47-8	Not Listed
• Quartz	14808-60-7	Not Listed
• Graphite	7782-42-5	Not Listed

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

• Distillates (petroleum), hydrotreated light	64742-47-8	Not Listed
• Quartz	14808-60-7	Not Listed
• Graphite	7782-42-5	Not Listed

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

• Distillates (petroleum), hydrotreated light	64742-47-8	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.

Section16-OtherInformation

Relevant Phrases (code & full text)

H372 - Causes damage to organs through prolonged or repeated exposure.

Last Revision Date 24/April/2015

Preparation Date 24/April/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