SAFETY DATA SHEET



1. Identification

Product identifier KLONDIKE ISO 680 EP Full Synthetic Industrial Gear Lubricant

Other means of identification

Product code ISO 680 EP Full Syn

Recommended use Full Synthetic Industrial Gear Lubricant

Recommended restrictions None known.

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

KLONDIKE Lubricants Corporation Company name

Address 3078 275th Street

Langley, BC V4W 3L4

Canada

1-877-293-4691 **Telephone** General Information

Website www.klondikelubricants.com E-mail info@klondikelubricants.com

Emergency phone number Chemtrec (Within US) 1-800-424-9300

1-703-527-3887 Chemtrec (International)

Supplier Refer to Manufacturer

2. Hazard(s) identification

Physical hazards This mixture does not meet the classification criteria according to OSHA HazCom 2012. **Health hazards** This mixture does not meet the classification criteria according to OSHA HazCom 2012. **Environmental hazards** This mixture does not meet the classification criteria according to OSHA HazCom 2012. **OSHA** defined hazards This mixture does not meet the classification criteria according to OSHA HazCom 2012.

Label elements

None. Hazard symbol Signal word None.

Hazard statement The mixture does not meet the criteria for classification.

Precautionary statement

Prevention Observe good industrial hygiene practices.

Response Wash hands after handling.

Storage Store away from incompatible materials.

Dispose of waste and residues in accordance with local authority requirements. **Disposal**

Hazard(s) not otherwise

No OSHA defined hazard classes.

classified (HNOC) Other hazards which do not result in classification: May cause mild skin and eye irritation. May

cause respiratory irritation. May cause discomfort if swallowed.

Supplemental information

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
Severely hydrotreated synthetic base oil	Not Available	Proprietary	90 - 100

The base oil may be a mixture of the following CAS#'s: 8042-47-5; 64742-46-7; 64742-47-8; **Composition comments**

64742-53-6; 64742-54-7; 64742-55-8; 72623-84-8; 72623-85-9; 72623-86-0; 72623-87-1;

178603-64-0; 178603-64-0; 178603-66-2; 445411-73-4.

4. First-aid measures

Inhalation Move to fresh air. Call a physician if symptoms develop or persist. **Skin contact** Wash off with soap and water. Get medical attention if irritation develops and persists.

Eye contact Rinse with water. Get medical attention if irritation develops and persists.

IngestionRinse mouth. Get medical attention if symptoms occur.Most importantDirect contact with eyes may cause temporary irritation.

symptoms/effects, acute and

delayed

Indication of immediate medical attention and special

Treat symptomatically.

treatment needed
General information

Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. Fire-fighting measures

Suitable extinguishing media Unsuitable extinguishing media Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2). Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical

During fire, gases hazardous to health may be formed.

Special protective equipment and precautions for firefighters

Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Fire-fighting equipment/instructions

Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA. Evacuate area. Remove all sources of ignition. Ventilate the contaminated area. Move containers from fire area if you can do so without risk. Containers should be cooled with water to prevent vapor pressure build up. Prevent fire extinguishing water from contaminating surface water or the ground water system. Use standard firefighting procedures and consider the hazards of other involved materials.

Specific methods
Use standard firefighting procedures and co
General fire hazards
No unusual fire or explosion hazards noted.

Hazardous combustion products

Carbon oxides. Nitrogen oxides (NOx). Sulphur oxides. Phosphorus oxides. Hydrocarbons.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures Keep unnecessary personnel away. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.

Environmental precautions

Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling

Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities

Store in original tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

No exposure limits noted for ingredient(s).

Biological limit values

No biological exposure limits noted for the ingredient(s).

Appropriate engineering controls

Use general or local exhaust ventilation to maintain air concentrations below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Ventilation should be sufficient to effectively remove and prevent buildup of any dusts or fumes that may be generated during handling or thermal processing.

Individual protection measures, such as personal protective equipment

Eye/face protection

Wear safety glasses with side shields (or goggles). Eye wash facilities and emergency shower must be available when handling this product.

Skin protection

Wear appropriate chemical resistant gloves. Advice should be sought from glove suppliers. Hand protection

Wear suitable protective clothing. Other

Respiratory protection In case of insufficient ventilation, wear suitable respiratory equipment. Advice should be sought

from respiratory protection specialists.

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective

equipment to remove contaminants.

9. Physical and chemical properties

Viscous. **Appearance** Liquid. Physical state **Form** Liquid. Color Amber.

Odor Mild petroleum odor.

Odor threshold Not available. Not available. pН Not available. Melting point/freezing point Initial boiling point and boiling > 280 °C (536 °F)

range

Flash point 266.0 °C (510.8 °F) **Evaporation rate** Not available. Flammability (solid, gas) Not available. Upper/lower flammability or explosive limits

Flammability limit - lower

(%)

Flammability limit - upper

Not available.

Not available.

(%)

Not available. Explosive limit - lower (%) Explosive limit - upper (%) Not available. Vapor pressure > 0.01 mm Hg

> 1 Vapor density

Not available. Relative density

Solubility(ies)

Solubility (water) Insoluble **Partition coefficient** Not available.

(n-octanol/water)

Not available. **Auto-ignition temperature Decomposition temperature** Not available. **Viscosity** 680 cSt

Other information

Flammability class Combustible IIIB estimated

0.85 Specific gravity

10. Stability and reactivity

The product is stable and non-reactive under normal conditions of use, storage and transport. Reactivity

Material is stable under normal conditions. **Chemical stability**

Possibility of hazardous

reactions

No dangerous reaction known under conditions of normal use.

Contact with incompatible materials. Do not use in areas without adequate ventilation Conditions to avoid

Incompatible materials Strong oxidizing agents. Hazardous decomposition products

The following may be released during a fire: Carbon oxides. Hydrocarbons. Nitrogen oxides (NOx). Phosphorus oxides. Sulfur oxides.

11. Toxicological information

Information on likely routes of exposure

May cause irritation of the gastrointestinal tract. Ingestion May cause irritation to the respiratory system. Inhalation

May cause mild skin irritation. Skin contact

Eye contact Direct contact with eyes may cause temporary irritation.

Symptoms related to the physical, chemical and toxicological characteristics Direct contact with eyes may cause temporary irritation. Direct skin contact may cause slight or mild, transient irritation. May cause respiratory irritation. Symptoms may include upper respiratory irritation, coughing, and breathing difficulties. Ingestion may cause gastrointestinal irritation,

nausea, vomiting and diarrhea.

Information on toxicological effects

Acute toxicity May cause mild irritation to skin, eyes and respiratory system. Ingestion may cause

gastrointestinal irritation, nausea, vomiting and diarrhea.

Components **Species Test Results**

Severely hydrotreated synthetic base oil (CAS Proprietary)

Acute

Dermal

LD50 No data in literature

Inhalation

LC50 No data in literature

Oral

LD50 No data in literature

Skin corrosion/irritation

Prolonged skin contact may cause temporary irritation. Direct contact with eyes may cause temporary irritation.

Serious eve damage/eve irritation

Respiratory or skin sensitization

Respiratory sensitization This product is not expected to cause respiratory sensitization.

This product is not expected to be a skin sensitizer. Skin sensitization

Germ cell mutagenicity Not expected to be mutagenic in humans.

Carcinogenicity This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

Reproductive toxicity This product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity -

single exposure

Not classified.

Specific target organ toxicity -

repeated exposure

Not classified.

Aspiration toxicity

Not available.

12. Ecological information

The product is not classified as environmentally hazardous. However, this does not exclude the **Ecotoxicity**

possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Persistence and degradability

No data is available on the degradability of this product.

Bioaccumulative potential Mobility in soil

No data available. No data available.

Other adverse effects

No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructions Collect and reclaim or dispose in sealed containers at licensed waste disposal site.

^{*} Estimates for product may be based on additional component data not shown.

Local disposal regulations Dispose in accordance with all applicable regulations.

Hazardous waste code The waste code should be assigned in discussion between the user, the producer and the waste

disposal company.

Waste from residues / unused

products

Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see:

Disposal instructions).

Contaminated packaging Empty containers should be taken to an approved waste handling site for recycling or disposal.

Since emptied containers may retain product residue, follow label warnings even after container is

emptied.

14. Transport information

DOT

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

This substance/mixture is not intended to be transported in bulk.

15. Regulatory information

US federal regulationsOne or more components are not listed on TSCA.

This product is not known to be a "Hazardous Chemical" as defined by the OSHA Hazard

Communication Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard - No

Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous

No

chemical

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act

Not regulated.

(SDWA)

US state regulations

US. Massachusetts RTK - Substance List

Not regulated.

US. New Jersey Worker and Community Right-to-Know Act

Not listed.

US. Pennsylvania Worker and Community Right-to-Know Law

Not listed.

US. Rhode Island RTK

Not regulated.

US. California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	No
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	No
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	No
New Zealand	New Zealand Inventory	No
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	No

^{*}A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "Ne" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the government.

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

United States & Puerto Rico Toxic Substances Control Act (TSCA) Inventory

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Version # 02

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No