KLONDIKE®

SAFETY DATA SHEET

1. Identification

Product identifier KLONDIKE ISO 260 Compressor Oil

Other means of identification

Product codeISO 260 CompressorRecommended useGas Compressor LubricantRecommended restrictionsNo restrictions on use known.Chemical familyPetroleum hydrocarbon

Manufacturer KLONDIKE Lubricants Corporation

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General Information 1-877-293-4691 Chemtrec (Within US) 1-800-424-9300 Chemtrec (International) 1-703-527-3887

Supplier information Refer to Manufacturer

2. Hazard(s) Identification

This material is classified as hazardous under U.S. OSHA regulations (29CFR 1910.1200) (Hazcom 2012) and Canadian WHMIS regulations (Hazardous Products Regulations) (WHMIS 2015).

Physical hazards

Not classified for physical hazards.

Health hazards

Not classified for health hazards.

Environmental hazards

Not currently regulated by Hazcom 2012 or WHMIS 2015. Consult section 12 for

details.

OSHA defined hazards

No OSHA defined hazard classes.

Label elements Signal Word None required according to OSHA Hazcom 2012.

Hazard statement(s) Not required
Not required

Precautionary statement(s)

Prevention

None required.

Response

Not required

Storage

Not required

Disposal

Not required

Hazard(s) not otherwise

Classified (HNOC)

Other hazards which do not result in classification:

Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. Contact

with eyes or skin may cause mild irritation.

Supplemental Information None reported by the manufacturer.

Material name: KLONDIKE ISO 260 Compressor Oil

3. Composition/information on ingredients

Mixture

| Chemical name | Common name and synonyms | CAS number | Concentration (%) |
|--|--|------------|-------------------|
| Hydrotreated heavy paraffinic mineral | oil | 64742-54-7 | 40.0 - 60.0 |
| | Hydrotreated, heavy paraffinic petroleum | | |
| Residual oils (petroleum), solvent refined | Solvent refined residual oil | 64742-01-4 | 40.0 - 60.0 |

4. First-aid measures

Inhalation If breathing is difficult, trained personnel should give oxygen. If breathing stops,

provide artificial respiration. Call a POISON CENTER or doctor/physician if you feel

unwell.

For skin contact, flush with water for at least 15 minutes, while removing contaminated Skin contact

clothing. If skin irritation occurs, get medical advice/attention.

Any material that contacts the eye should be washed out immediately with water. If Eye contact

easy to do, remove contact lenses. Get medical attention if symptoms persist. IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Do NOT Rinse mouth. If vomiting occurs spontaneously, keep victim's head induce vomiting.

lowered (forward) to reduce the risk of aspiration.

Most important symptoms and effects, both acute and

delayed

Ingestion

May be mildly irritating to skin, eyes and respiratory system. Ingestion may cause

gastrointestinal irritation, nausea, vomiting and diarrhea.

Indication of any immediate medical attention and special

treatment needed

Treat symptomatically.

General Information None reported by the manufacturer.

5. Fire-fighting measures

Water. Water spray. Dry chemicals. Foam. Carbon dioxide (CO2). Suitable extinguishing media

Unsuitable extinguishing

media

Do not use water jet as extinguisher, as this will spread the fire.

Specific hazards arising from the chemical

Thermal decomposition or combustion may liberate toxic gases or fumes.

Special protective equipment and precautions for fire-fighters (SCBA) and impervious clothing.

Firefighters should wear an approved full-face, self-contained breathing apparatus

Fire-fighting

Use water spray to cool unopened containers.

equipment/instructions

Specific methods Avoid release to the environment.

General fire hazards No unusual fire or explosion hazards noted.

Hazardous combustion products

Carbon oxides.

Nitrogen oxides (NOx).

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Keep unnecessary personnel away. Wear appropriate personal protective equipment. Do not touch damaged containers or spilled material unless wearing appropriate

protective clothing. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning

up

Remove all sources of ignition. Ventilate area of release. Stop the spill at source if it is safe to do so. Contain and absorb spilled liquid with non-combustible, inert absorbent material (e.g. sand), then place absorbent material into a container for later disposal (see Section 13).

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Environmental precautions

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

7. Handling and storage

Precautions for safe handling

When using, do not eat, drink or smoke. Wear appropriate personal protective equipment. Use only with adequate ventilation. Wash thoroughly after handling.

Conditions for safe storage,

including any incompatibilities Keep container tightly closed. Keep cool. Store away from incompatible materials.

8. Exposure controls/personal protection

Occupational exposure limits

U.S. OSHA Exposure Limits (29 CFR 1910)

| • | Туре | Value |
|---|------|---|
| Hydrotreated heavy paraffinic mineral oil (CAS 64742-54-7) | | |
| | TWA | 5 mg/m³ (As 'Oil mist, mineral') |
| Residual oils (petroleum), solvent refined (CAS 64742-01-4) | | |
| , | TWA | 5 mg/m3 |
| US. ACGIH Threshold Limit Valu | ıes | |
| | Туре | Value |
| Hydrotreated heavy paraffinic mineral oil (CAS 64742-54-7) | TWA | 5 mg/m³ (inhalable) (severely refined mineral oils) |
| Residual oils (petroleum), solvent refined (CAS 64742-01-4) | TWA | 10 mg/m3 |

Biological limit values

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

Appropriate engineering

controls

Ensure adequate ventilation, especially in confined areas.

Individual protection measures, such as personal protective equipment

Eye / face protection Wear safety glasses with side shields (or goggles).

Skin protection

Hand protection Chemical resistant gloves recommended.

Other Wear chemical-resistant gloves, footwear, and protective clothing appropriate for the

risk of exposure. Contact health or safety professional or manufacturer for specific

information.

Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fume at **Respiratory protection**

levels exceeding the exposure limits.

Thermal hazards

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

Appearance

Physical state Liquid. **Form** Amber liquid. Color amber

Odor Mild petroleum odour.

Not available. **Odor threshold** Not available. pН Melting point /freezing point Not available.

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Initial boiling point and boiling range

Not available.

>200°C Flash point

Cleveland closed cup

Evaporation rate Not available. Flammability (solid, gas) Not applicable. Not available. Lower flammability/explosive

limit

Upper flammability/explosive

limit

Not available.

Not available. Vapour pressure Vapour density > 1 (Air = 1)88.0 Relative density

Solubility(ies)

Other solubility(ies) Not available. Solubility (water) Insoluble. Partition coefficient Not available.

(n-octanol/water)

Auto-ignition temperature Not available. **Decomposition temperature** Not available. 260

Viscosity

Other information

Explosive properties Not explosive Not available. Oxidizing properties

Specific gravity 0.88

Critical temperature Not available. VOC Not available.

Volatilities % Nil

Flame projection Not available.

length

Flashback observed Not available. Absolute pressure of Not available.

container

Other

physical/chemical data

None known or reported by the manufacturer.

10. Stability and reactivity

Reactivity

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

transport.

Chemical stability

Stable under normal conditions.

Possibility of hazardous

reactions

Hazardous polymerization does not occur.

Conditions to avoid

High temperatures, flame, sparks, high humidity, light, water, and moisture.

Incompatible materials

Oxidizing agents

Hazardous decomposition

Carbon oxides.

products Nitrogen oxides (NOx).

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11. Toxicological information

Information on likely routes of exposure

 $\begin{array}{lll} \textbf{Routes of entry inhalation} & \textbf{YES} \\ \textbf{Routes of entry skin \& eye} & \textbf{YES} \\ \textbf{Routes of entry Ingestion} & \textbf{YES} \\ \textbf{Routes of exposure skin} & \textbf{YES} \\ \end{array}$

absorption

Most important

symptoms/effects, acute and delayed

May be mildly irritating to skin, eyes and respiratory system. Ingestion may cause

gastrointestinal irritation, nausea, vomiting and diarrhea.

Information on toxicological effects

Acute toxicity See below for toxicological data on the substance.

Components Species Test Results

Hydrotreated heavy paraffinic mineral oil

Acute

Dermal

LD50 Rabbit > 5000 mg/kg

inhalation

LC50 Rat > 5.53 mg/L (mist)

Oral

I D50 Rat > 15 000 mg/kg

Residual oils (petroleum), solvent refined

Acute

Dermal

LD50 Rabbit >2000 mg/kg

inhalation

LC50 Rat >2180 mg/m³

Oral

LD50 Rat >5000 mg/kg

Skin Corrosion/Irritation May cause mild skin irritation.

Serious eye damage/Irritation May cause mild eye irritation.

Respiratory or skin

May cause mild eye irritation.

Not expected to be a skin or respiratory sensitizer.

sensitization

Germ cell mutagenicity Not expected to be mutagenic.

Carcinogenicity No components are listed as carcinogens by ACGIH, IARC, OSHA or NTP.

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

Specific target organ toxicity -

single exposure

Not classified as a specific target organ toxicity-single exposure.

Specific target organ toxicity -

repeated exposure

Not classified as specific target organ toxicity-repeated exposure.

Chronic effects Prolonged or repeated skin contact may cause defatting and drying resulting in

irritation and possible dermatitis.

Aspiration toxicity

Aspiration hazard. May be fatal if swallowed and enters airways. Small amounts of

liquid aspirated into the respiratory system during ingestion or from vomiting may cause mild to severe pulmonary injury and possibly death. Symptoms of pulmonary

edema (chest pain, shortness of breath) may be delayed.

Further information None reported by the manufacturer.

Material name: KLONDIKE ISO 260 Compressor Oil

12. Ecological information

Ecotoxicity

The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

| Ecotoxicity data: | | | | | | | |
|--|------------|-------------------------------|------------------------------|----------|--|--|--|
| | 0.10 N | | Toxicity to Fish | | | | |
| Ingredients | CAS No | LC50 / 96h | NOEC / 21 day | M Factor | | | |
| Hydrotreated heavy paraffinic mineral oil | 64742-54-7 | > 5000 mg/L (Rainbow trout) | > 1000 mg/L/28-day (QSAR) | None. | | | |
| Residual oils (petroleum), solvent refined | 64742-01-4 | : >5000 mg/L (Fathead minnow) | N/Av | None. | | | |

| Ingredients | CAS No | Toxicity to Daphnia | | | | |
|--|------------|--|---------------|----------|--|--|
| | | EC50 / 48h | NOEC / 21 day | M Factor | | |
| Hydrotreated heavy paraffinic mineral oil | 64742-54-7 | > 10 000 mg/L (Daphnia magna) (Read-across) | 10 mg/L | None. | | |
| Residual oils (petroleum), solvent refined | 64742-01-4 | >1000 mg/L Daphnia magna (Water flea) | N/Av | None. | | |

| Ingredients | CAS No | Toxicity to Algae | | | | |
|--|------------|-------------------|---|----------|--|--|
| | | EC50 / 96h or 72h | NOEC / 96h or 72h | M Factor | | |
| Hydrotreated heavy paraffinic mineral oil | 64742-54-7 | N/Av | > 100 mg/L/72hr (Green algae) (Read-across) | None. | | |
| Residual oils (petroleum), solvent refined | 64742-01-4 | N/Av | N/Av | None. | | |

Persistence and degradability

Not readily biodegradable.

Bioaccumulation potential

Not available.

| <u>Components</u> | Partition coefficient n-octanol/water (log Kow) | Bioconcentration factor (BCF) |
|---|---|-------------------------------|
| Hydrotreated heavy paraffinic mineral oil (CAS 64742-54-7) | 3.9 - 6 | N/Av |
| Residual oils (petroleum), solvent refined (CAS 64742-01-4) | 3.9-6 | N/Av |
| Mobility in soil | Not available. | |
| Other advance offeets | | |

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 consideration

Disposal instructions Local disposal regulations Hazardous waste code

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

Dispose in accordance with all applicable regulations.

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

49CFR/DOT

Not regulated as dangerous goods

ICAO/IATA

Not regulated as dangerous goods

IMDG

Not regulated as dangerous goods

TDG

Not regulated as dangerous goods

General information Keep away from heat, sparks and open flame. - No smoking.

Transport in bulk according to Not established.

Annex II of MARPOL 73/78 and

the IBC Code

15. Regulatory information

US Federal Information: This product is not a "Hazardous Chemical" as defined by the OSHA Hazard

Communication Standard, 29 CFR 1910.1200.

All components are on the U.S. EPA TSCA Inventory list.

Components listed below are present on the following U.S. Federal chemical lists:

| <u>Ingredients</u> | CAS# | TSCA Inventory | CERCLA Reportable Quantity(RQ) (40 CFR 117.302): | SARA TITLE III: Sec. 302, Extremely Hazardous Substance, 40 CFR 355: | SARA TITLE III: So 372, Specific To Toxic Chemical | |
|--|------------|-------------------|---|--|--|----|
| Hydrotreated heavy paraffinic mineral oil | 64742-54-7 | Yes | N/Ap | N/Av | No | No |
| Residual oils (petroleum), solvent refined | 64742-01-4 | Yes | N/Ap | N/Av | No | No |

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Immediate Hazard - NO **Hazard categories**

> Delayed Hazard -NO Fire Hazard -NO Pressure Hazard -NO Reactivity Hazard - NO

US state regulations

The following chemicals are specifically listed by individual States:

| <u>Ingredients</u> | California Propo | | a Proposition 65 | Proposition 65 State "Right to Know" Lists | | | | Lists | | |
|--|------------------|--------|------------------|--|----|----|----|-------|----|--|
| | J. 13 | Listed | Type of Toxicity | CA | MA | MN | NJ | PA | RI | |
| Hydrotreated heavy paraffinic mineral oil | 64742-54-7 | No | N/Ap | No | No | No | No | No | No | |
| Residual oils (petroleum), solvent refined | 64742-01-4 | No | N/Ap | No | No | No | No | No | No | |

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Canadian Information:

Canadian Environmental Protection Act (CEPA) information: All ingredients listed appear on the Domestic Substances List (DSL).

International Inventories

Components listed below are present on the following International Inventory lists:

| <u>Ingredients</u> | CAS# | European EINECs | Australia AICS | Philippines PICCS | Japan ENCS | Korea KECI/KECL | China IECSC | NewZealand IOC |
|--|------------|--------------------|-------------------|----------------------|--------------------------------|--------------------|----------------|--|
| Hydrotreated heavy paraffinic mineral oil | 64742-54-7 | 265-157-1 | Present | Present | (2)-10; (9)-1692; (9) -1692 | KE-12546 | Present | May be used as a single component chemical under an appropriate group standard |
| Residual oils (petroleum), solvent refined | 64742-01-4 | 265-101-6 | Present | Present | No data available. | KE-30124 | Present | No information available. |

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

Issue date 07/25/2016

Version #

Legend ACGIH: American Conference of Governmental Industrial Hygienists

CA: California

CAS: Chemical Abstract Services

CEPA: Canadian Environmental Protection Act

CERCLA: Comprehensive Environmental Response, Compensation, and Liability Act

of 1980

CFR: Code of Federal Regulations CPR: Controlled Products Regulation CSA: Canadian Standards Association **DOT: Department of Transportation** DSL: Domestic Substances List EPA: Environmental Protection Agency

HMIS: Hazardous Materials Identification System

HPA: Hazardous Products Act

HSDB: Hazardous Substances Data Bank

IARC: International Agency for Research on Cancer IATA: International Air Transport Association ICAO: International Civil Aviation Organisation IMDG: International Maritime Dangerous Goods

Inh: Inhalation

LC: Lethal Concentration

LD: Lethal Dose MA: Massachusetts MN: Minnesota N/Ap: Not Applicable N/Av: Not Available

NFPA: National Fire Protection Association

NIOSH: National Institute of Occupational Safety and Health

NJ: New Jersey

NOEC: No observable effect concentration

NTP: National Toxicology Program

OECD: Organisation for Economic Co-operation and Development

OEL: National occupational exposure limits

OSHA: Occupational Safety and Health Administration

Material name: KLONDIKE ISO 260 Compressor Oil

PA: Pennsylvania

PEL: Permissible exposure limit PPE: Personal Protective Equipment

RCRA: Resource Conservation and Recovery Act

RI: Rhode Island RQ: Reportable Quantity

RTECS: Registry of Toxic Effects of Chemical Substances SARA: Superfund Amendments and Reauthorization Act

SDS: Safety Data Sheet

STEL: Short Term Exposure Limit

TDG: Canadian Transportation of Dangerous Goods Act & Regulations

TLV: Threshold Limit Values TWA: Time Weighted Average WEL: Workplace Exposure Limit

WHMIS: Workplace Hazardous Materials Identification System

Other special considerations for handling

: Provide adequate information, instruction and training for operators.

Disclaimer

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Bibliography

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- 2. International Agency for Research on Cancer Monographs, searched 2016 3. Canadian Centre for Occupational Health and Safety, CCInfoWeb databases, 2016(Chempendium, HSDB and RTECs).
- 4. Material Safety Data Sheets from manufacturer.
- 5. US EPA Title III List of Lists 2016 version.
- 6. California Proposition 65 List 2016 version.
- 7. OECD The Global Portal to Information on Chemical Substances eChemPortal, 2016.

Material name: KLONDIKE ISO 260 Compressor Oil