SAFETY DATA SHEET



1. Identification

Product identifier KLONDIKE Max AW22 Premium Hydraulic Oil

Other means of identification

ISO AW22 Product code Recommended use Hydraulic Fluid Recommended restrictions None known. Manufacturer/Importer/Supplier/Distributor information

Manufacturer

KLONDIKE Lubricants Corporation Company name

3078 275th Street Address

Langley, BC V4W 3L4

Canada

Telephone General Information 1-877-293-4691

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

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

> Chemtrec (International) 1-703-527-3887

Refer to Manufacturer Supplier

2. Hazard(s) identification

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

Label elements

None. Hazard symbol None. Signal word

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

Precautionary statement

Observe good industrial hygiene practices. Prevention

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. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. Product may present an aspiration hazard, if ingested in large amounts. Aspiration into the lungs during swallowing or subsequent vomiting may cause chemical pneumonitis, which can

be fatal.

Supplemental information None.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
Distillates (petroleum), Hydrotreated Heavy Paraffinic	HEAVY BASE OILS (HEAVY PARAFFINIC HYDROTREATED DISTILLATE)	64742-54-7	60 - 100
Distillates (petroleum), Hydrotreated Light Paraffinic	Not Available	64742-55-8	60 - 100

^{*}Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

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4. First-aid measures

Move to fresh air. Call a physician if symptoms develop or persist. Inhalation

Skin contact Wash off with soap and water. Get medical attention if irritation develops and persists.

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

Ingestion Call a physician or poison control center immediately. Never give anything by mouth to a victim

who is unconscious or is having convulsions. Do not induce vomiting. If vomiting occurs, keep

head low so that stomach content doesn't get into the lungs.

Most important

symptoms/effects, acute and

delayed

May be mildly irritating to skin, eyes and respiratory system. Symptoms may include redness, edema, drying, defatting and cracking of the skin. Symptoms may include stinging and tearing. Symptoms may include upper respiratory irritation, coughing, and breathing difficulties. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. Product may present an aspiration hazard, if ingested in large amounts. Aspiration into the lungs during swallowing or

subsequent vomiting may cause chemical pneumonitis, which can be fatal.

Indication of immediate medical attention and special

treatment needed General information

If you feel unwell, seek medical advice (show the label where possible).

5. Fire-fighting measures

Suitable extinguishing media Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).

Treat symptomatically.

Unsuitable extinguishing

media

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

Ventilate the contaminated area. As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. 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

No unusual fire or explosion hazards noted.

General fire hazards

Hazardous combustion

products

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

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Keep unnecessary personnel away. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Use only non-sparking tools. Avoid inhalation of vapors and spray mists. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up The product is immiscible with water and will spread on the water surface.

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: Absorb in vermiculite, dry sand or earth and place into containers. 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

Do not handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. Do not ingest. Avoid inhalation of vapors and spray mists. Avoid contact with eyes, skin, and clothing. Use only outdoors or in a well-ventilated area. Wear appropriate personal protective equipment. Observegood industrial hygiene practices. Handle and open container with care.

Conditions for safe storage, including any incompatibilities Store locked up. Keep away from heat, sparks and open flame. Store in original tightly closed container. Store in a well-ventilated place. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Form Components Type Value PEL Distillates (petroleum), 5 mg/m3 Mist. **Hydrotreated Light** Paraffinic (CAS 64742-55-8) US. NIOSH: Pocket Guide to Chemical Hazards Form Components Type Value Distillates (petroleum), STEL 10 mg/m3 Mist.

Hydrotreated Light Paraffinic (CAS 64742-55-8)

TW A 5 mg/m3 Mist.

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

Appropriate engineering controls

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

Wear safety glasses with side shields (or goggles). Provide an emergency eye wash fountain and Eye/face protection

quick drench shower in the immediate work area.

Skin protection

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

Other Wear suitable protective clothing.

In case of insufficient ventilation, wear suitable respiratory equipment. Seek advice from Respiratory protection

respiratory protection specialists.

Wear appropriate thermal protective clothing, when necessary. Thermal hazards

Always observe good personal hygiene measures, such as washing after handling the material General hygiene considerations

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. Liquid. Form Color Dark amber.

Odor Mild petroleum odor.

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

range

210.0 °C (410 °F) Flash point **Evaporation rate** Not available. Flammability (solid, gas) Not available.

Upper/lower flammability or explosive limits

Not available. Explosive limit - lower (%) Not available. Explosive limit - upper (%)

< 1 kPa Vapor pressure > 10 Vapor density

Relative density Not available.

Solubility(ies)

Insoluble Solubility (water)

Partition coefficient

(n-octanol/water)

Not available.

Auto-ignition temperature

Not available. Not available. Decomposition temperature

22 cSt Viscosity

Other information

Percent volatile Negligible 0.86 Specific gravity

10. Stability and reactivity

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

Chemical stability Material is stable under normal conditions.

Possibility of hazardous

reactions

No dangerous reaction known under conditions of normal use.

Conditions to avoid Avoid temperatures exceeding the flash point. Contact with incompatible materials. Do not use in

areas without adequate ventilation.

Incompatible materials Strong oxidizing agents.

Hazardous decomposition

products

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

11. Toxicological information

Information on likely routes of exposure

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

Inhalation of vapors/fumes generated by heating this product may cause respiratory irritation with Inhalation

throat discomfort, coughing or difficulty breathing.

May cause mild skin irritation. Skin contact May cause mild eye irritation. Eye contact

Symptoms related to the physical, chemical and toxicological characteristics

May cause mild skin and eye irritation. Symptoms may include redness, edema, drying, defatting and cracking of the skin. Symptoms may include stinging and tearing. May cause respiratory irritation. Symptoms may include upper respiratory irritation, coughing, and breathing difficulties. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. Product may present an aspiration hazard, if ingested in large amounts. Aspiration into the lungs during swallowing or subsequent vomiting may cause chemical pneumonitis, which can be fatal.

Information on toxicological effects

Acute toxicity See below for individual ingredient acute toxicity data.

Test Results Components Species

Distillates (petroleum), Hydrotreated Heavy Paraffinic (CAS 64742-54-7)

Acute

Dermal

LD50 Rabbit > 5000 mg/kg

Inhalation

LC50 Rat > 5 mg/l, 4 Hours (Mist)

Oral

LD50 > 15000 mg/kg

Distillates (petroleum), Hydrotreated Light Paraffnic (CAS 64742-55-8)

Acute

Dermal

LD50 Rabbit > 5000 mg/kg

Inhalation

LC50 Rat > 4000 mg/m3, 4 hours

Oral

LD50 > 2000 mg/kgRat

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

Skin corrosion/irritation May be irritating to the skin.

Serious eye damage/eye Direct contact may cau

irritation

Direct contact may cause very mild, temporary irritation and redness.

Respiratory or skin sensitization

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

Skin sensitization Not expected to be a skin sensitizer.

Germ cell mutagenicity

No data available to indicate product or any components present at greater than 0.1% are

mutagenic or genotoxic.

Carcinogenicity

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

US. National Toxicology Program (NTP) Report on Carcinogens

Distillates (petroleum), Hydrotreated Light Paraffinic Known To Be Human Carcinogen.

(CAS 64742-55-8)

Reproductive toxicity

This product is not expected to cause reproductive or developmental 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 a specific target organ toxicity-repeated exposure.

Chronic effects Frequent or prolonged contact may defat and dry the skin, leading to discomfort and dermatitis.

Further information This product has no known adverse effect on human health.

Aspiration toxicity Not expected to be hazardous by OSHA criteria.

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 havea harmful or damaging effect on the environment.

Components Species Test Results

Distillates (petroleum), Hydrotreated Heavy Paraffinic (CAS 64742-54-7)

Aquatic

Acute

Crustacea EC50 Water flea (Daphnia magna) > 10000 mg/l, 48 hours
Fish LC50 Fathead minnow (Pimephales promelas) > 100 mg/l, 96 hours

Chronic

Crustacea NOEC Water flea (Daphnia magna) 10 mg/l, 21 days

Distillates (petroleum), Hydrotreated Light Paraffinic (CAS 64742-55-8)

Aquatic

Acute

Crustacea EC50 Water flea (Daphnia magna) > 10000 mg/l, 48 hours
Fish LC50 Fathead minnow (Pimephales promelas) > 100 mg/l, 96 hours

Chronic

Crustacea NOEC Water flea (Daphnia magna) 10 mg/l, 21 days

Persistence and degradability Distillates, (petroleum), Hydrotreated Heavy Paraffinic is considered to be not readily

biodegradable.

Bioaccumulative potential No data available.

Mobility in soil 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.

Local disposal regulations Dispose in accordance with all applicable regulations.

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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 regulations This product is not known to be 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.

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

Distillates (petroleum), Hydrotreated Light Paraffinic (CAS 64742-55-8)

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

Not listed.

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

Distillates (petroleum), Hydrotreated Light Paraffinic (CAS 64742-55-8)

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)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
E urope	E uropean Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
E urope	European List of Notified Chemical Substances (ELINCS)	No
lanan	Inventory of Existing and New Chemical Substances (ENCS)	No

JapanInventory of Existing and New Chemical Substances (ENCS)NoKoreaExisting Chemicals List (ECL)YesNew ZealandNew Zealand InventoryYes

Philippines Philippine Inventory of Chemicals and Chemical Substances

(PICCS)

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

Yes

Yes

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

Issue date 04-15-2016

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

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).