



SAFETY DATA SHEET

1. Identification

Product identifier KLONDIKE SAE 5W-40 SN/CF Euro Spec Full Synthetic Engine Oil

Other means of identification

Product code 5W-40 SN/CF Euro Full Syn

Recommended use Full Synthetic Automotive Engine Oil

Recommended restrictions None known.

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

Company name KLONDIKE Lubricants Corporation
Address 3078 275th Street
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

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

Hazard symbol None.

Signal word None.

Hazard statement Not available.

Precautionary statement

Prevention Observe good industrial hygiene practices.

Response Wash hands after handling.

Storage Store away from incompatible materials.

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

Hazard(s) not otherwise classified (HNOC) 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. Frequent or prolonged contact may defat and dry the skin, leading to discomfort and dermatitis.

Supplemental information Not applicable.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
Distillates, (petroleum), Hydrotreated Heavy Paraffinic	Not Available	64742-54-7	60 - 100
Zinc, Dithiophosphate Di-c1-14-alkyl Esters	PHOSPHORODITHIOIC ACID, O,O-DI-C1-14-ALKYL ESTERS, ZINC SALTS.	68649-42-3	1 - 5

The exact concentrations of the above listed chemicals are being withheld as a trade secret as allowed by 29CFR1910.1200.

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.
Ingestion	Rinse mouth. Get medical attention if symptoms occur.
Most important symptoms/effects, acute and delayed	Direct contact with eyes may cause temporary irritation.
Indication of immediate medical attention and special treatment needed	Treat symptomatically.
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	Water fog. Foam. Dry chemical powder. Carbon dioxide (CO ₂).
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	Evacuate area and fight fire from a safe distance. Ventilate the contaminated area. Remove all sources of ignition. Cool containers / tanks with water spray. Move containers from fire area if you can do so without risk. Prevent fire extinguishing water from contaminating surface water or the ground water system.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.
General fire hazards	No unusual fire or explosion hazards noted.
Hazardous combustion products	Hydrocarbons. Phosphorus oxides. Sulphur oxides. Nitrogen oxides (NO _x). Other irritating fumes and smoke.

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	<p>This product is miscible in water.</p> <p>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.</p> <p>Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.</p> <p>Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.</p>
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

U.S. - OSHA Components

	Type	Value	Form
Zinc, Dithiophosphate	TWA		None
Di-c1-14-alkyl Esters (CAS 68649-42-3)			

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	
Eye/face protection	If contact is likely, safety glasses with side shields are recommended. Eye wash facilities and emergency shower must be available when handling this product.
Skin protection	
Hand protection	For prolonged or repeated skin contact use suitable protective gloves. Advice should be sought from glove suppliers.
Other	Wear suitable protective clothing.
Respiratory protection	Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fume at levels exceeding the exposure limits. 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

Appearance

Physical state	Liquid.
Form	Liquid.
Color	Amber.
Odor	Mild petroleum odor.
Odor threshold	Not available.
pH	Not available.
Melting point/freezing point	Not available.
Initial boiling point and boiling range	> 300 °C (572 °F)
Flash point	> 200.0 °C (392°F)
Evaporation rate	Not available.
Flammability (solid, gas)	Not available.

Upper/lower flammability or explosive limits

Flammability limit - lower (%)	Not available.
Flammability limit - upper (%)	Not available.
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	< 0.01 mm Hg
Vapor density	>= 10
Relative density	Not available.
Solubility(ies)	
Solubility (water)	Not Soluble
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.
Other information	
Kinematic viscosity	88 cSt
Specific gravity	0.85

10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
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. Direct sources of heat. Do not use in areas without adequate ventilation.
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	None known, refer to hazardous combustion products in Section 5.

11. Toxicological information

Information on likely routes of exposure

Ingestion	May cause discomfort if swallowed.
Inhalation	May cause irritation to the respiratory system.
Skin contact	May cause mild skin irritation.
Eye contact	May cause mild eye irritation.

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, tearing, redness, swelling, and blurred vision. May cause respiratory irritation. Symptoms may include coughing, choking and wheezing. 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 May cause mild irritation to skin, eyes and respiratory system.

Components	Species	Test Results
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Distillates, (petroleum), Hydrotreated Heavy Paraffinic (CAS 64742-54-7)

Acute



LD50	Rabbit	> 5000 mg/kg
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LD50	Rat	> 15000 mg/kg
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Zinc, Dithiophosphate Di-c1-14-alkyl Esters (CAS 68649-42-3)

Acute



LC50	Rabbit	No data in literature
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LC50	Rat	No data in literature
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LD50	Rat	26100 mg/kg
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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 irritation May be irritating to eyes.

Respiratory or skin sensitization

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

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 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.
Aspiration toxicity	Not available.

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.

Product	Species	Test Results
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KLONDIKE SAE 5W-40 SM/CF Euro Spec Full Synthetic Engine Oil (CAS Mixture)

Aquatic



Crustacea	EC50	Daphnia	28.4216 mg/l, 48 hours estimated
Fish	LC50	Fish	22.3528 mg/l, 96 hours estimated

Components	Species	Test Results
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Distillates, (petroleum), Hydrotreated Heavy Paraffinic (CAS 64742-54-7)

Aquatic



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



Crustacea	NOEC	Water flea (Daphnia magna)	10 mg/l, 21 days
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Zinc, Dithiophosphate Di-c1-14-alkyl Esters (CAS 68649-42-3)

Aquatic



Algae	EC50	Green algae (Selenastrum capricornutum)	1 - 5 mg/l, 96 hours
Crustacea	EC50	Water flea (Daphnia magna)	1 - 1.5 mg/l, 48 hours
Fish	LC50	Fathead minnow (Pimephales promelas)	1 - 5 mg/l, 96 hours



Algae	NOEC	Green algae (Selenastrum capricornutum)	1 mg/l, 96 hours
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* Estimates for product may be based on additional component data not shown.

Persistence and degradability	No data is available on the degradability of this product.
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.
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 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)

Zinc, Dithiophosphate Di-c1-14-alkyl Esters (CAS 68649-42-3) 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 chemical No

SARA 313 (TRI reporting)

Chemical name	CAS number	% by wt.
Zinc, Dithiophosphate Di-c1-14-alkyl Esters	68649-42-3	1 - 5

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 (SDWA) Not regulated.

US state regulations

US. Massachusetts RTK - Substance List

Not regulated.

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

Zinc, Dithiophosphate Di-c1-14-alkyl Esters (CAS 68649-42-3)

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

Not listed.

US. Rhode Island RTK

Zinc, Dithiophosphate Di-c1-14-alkyl Esters (CAS 68649-42-3)

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
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*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).

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

Issue date 03-14-2017

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