



MATERIAL SAFETY DATA SHEET

1. Product and Company Identification

Product identifier KLONDIKE SAE 0W-20 SN/GF-5 Full Synthetic Engine Oil
Version # 01
Issue date 03-27-2014
CAS # Mixture
Product code 0W-20 SN/GF-5 Full Syn
Product use Full Synthetic Automotive Engine Oil
Manufacturer information KLONDIKE Lubricants Corporation
3078 275th Street
Langley, BC V4W 3L4
Canada
info@klondikelubricants.com
www.klondikelubricants.com
General Information 1-877-293-4691
Chemtrec (Within US) 1-800-424-9300
Chemtrec (International) 1-703-527-3887
Supplier Refer to Manufacture

2. Hazards Identification

Emergency overview CAUTION
May cause mild skin and eye irritation. Inhalation of mist or vapor will cause irritation of mucous membranes in nose and throat leading to coughing, choking, headache and dizziness.

Potential health effects
Eyes Health injuries are not known or expected under normal use.
Skin Health injuries are not known or expected under normal use.
Inhalation Health injuries are not known or expected under normal use.
Ingestion Health injuries are not known or expected under normal use.

Potential environmental effects Components of this product are hazardous to aquatic life. May cause long-term adverse effects in the environment.

3. Composition / Information on Ingredients

Non-hazardous components	CAS #	Percent
Lubricating Oils (petroleum), C20-50, Hydrotreated Neutral Oil-based	72623-87-1	60 - 100
Other components below reportable levels		10 - 30

4. First Aid Measures

First aid procedures
Eye contact Rinse with water. Get medical attention if irritation develops and persists.
Skin contact Rinse skin with water/shower. Get medical attention if irritation develops and persists.
Inhalation If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing. Call a physician if symptoms develop or persist.
Ingestion Rinse mouth. If ingestion of a large amount does occur, call a poison control center immediately.
General advice If you feel unwell, seek medical advice (show the label where possible). Show this safety data sheet to the doctor in attendance.

5. Fire Fighting Measures

Flammable properties Not flammable by WHMIS criteria.
Extinguishing media
Suitable extinguishing media Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).

Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
Fire fighting equipment/instructions	Not available.
Explosion data	
Sensitivity to static discharge	Not sensitive.
Sensitivity to mechanical impact	Not sensitive.
Hazardous combustion products	Carbon oxides. Other irritating fumes and smoke.

6. Accidental Release Measures

Personal precautions	Keep unnecessary personnel away. For personal protection, see section 8 of the MSDS.
Environmental precautions	Prevent further leakage or spillage if safe to do so. Do not contaminate water.
Methods for containment	Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible.
Methods for cleaning up	Should not be released into the environment. 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: 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 MSDS.

7. Handling and Storage

Handling	Avoid release to the environment.
Storage	Store in original tightly closed container. Store away from incompatible materials (see Section 10 of the MSDS).

8. Exposure Controls / Personal Protection

Biological limit values	No biological exposure limits noted for the ingredient(s).
Personal protective equipment	
Eye / face protection	Not normally needed.
Skin protection	Wear suitable protective clothing.
Respiratory protection	No personal respiratory protective equipment normally required.

9. Physical & Chemical Properties

Appearance	Not available.
Physical state	Liquid.
Form	Liquid.
Color	Amber.
Odor	Mild petroleum odor.
Odor threshold	Not available.
pH	Not available.
Vapor pressure	< 0.2
Vapor density	Not available.
Boiling point	280 °C (536°F)
Melting point/Freezing point	Not available.
Solubility (water)	Insoluble
Specific gravity	0.85
Relative density	Not available.
Flash point	204.0 °C (399.2°F) Closed Cup

Flammability limits in air, upper, % by volume	Not available.
Flammability limits in air, lower, % by volume	Not available.
Auto-ignition temperature	Not available.
Evaporation rate	Not Available
Viscosity	42.3 cSt
Viscosity temperature	40 °C
Partition coefficient (n-octanol/water)	Not available
Other data	
Partition coefficient (oil/water)	Not Available

10. Chemical Stability & Reactivity Information

Chemical stability	Material is stable under normal conditions.
Conditions to avoid	Avoid temperatures exceeding the flash point. Contact with incompatible materials.
Incompatible materials	Not available.
Hazardous decomposition products	Not available.

11. Toxicological Information

Toxicological data		
Components	Species	Test Results
Lubricating Oils (petroleum), C20-50, Hydrotreated Neutral Oil-based (CAS 72623-87-1)		
Acute		
<i>Dermal</i>		
LD50	Rabbit	> 2000 mg/kg
<i>Inhalation</i>		
LC50	Rat	>= 2.18 mg/l/4h
<i>Oral</i>		
LD50	Rat	> 2000 mg/kg

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

Acute effects	
Sensitization	Not expected to be a skin or respiratory sensitizer.
Chronic effects	Not expected to be hazardous by WHMIS criteria.
Synergistic materials	None known.

12. Ecological Information

Ecotoxicological data			
Product		Species	Test Results
KLONDIKE SAE 0W-20 SN/GF-5 Full Synthetic Engine Oil (CAS Mixture)			
Aquatic			
Acute			
Crustacea	EC50	Daphnia	11764.7061 mg/l, 48 hours estimated
Fish	LC50	Fish	117.6471 mg/l, 96 hours estimated
Components		Species	Test Results
Lubricating Oils (petroleum), C20-50, Hydrotreated Neutral Oil-based (CAS 72623-87-1)			
Aquatic			
Acute			
Crustacea	EC50	Water flea (Daphnia magna)	> 10000 mg/l, 48 hours
Fish	LC50	Fathead minnow (Pimephales promelas)	> 100 mg/l, 96 hours

Components	Species		Test Results
<i>Chronic</i>			
Algae	NOEC	Green Algae (<i>Pseudokirchneriella subcapitata</i>)	100 mg/l, 72 hours
Crustacea	NOEC	Water flea (<i>Daphnia magna</i>)	10 mg/l, 21 days

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

Ecotoxicity	Components of this product are hazardous to aquatic life.
Environmental effects	Harmful to aquatic organisms. An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.
Persistence and degradability	Not available.
Mobility in environmental media	The product is immiscible with water and will spread on the water surface.

13. Disposal Considerations

Disposal instructions	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow this material to drain into sewers/water supplies. Dispose in accordance with all applicable regulations.
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

TDG	Not regulated as dangerous goods.
IATA	Not regulated as dangerous goods.
IMDG	Not regulated as dangerous goods.

15. Regulatory Information

Canadian regulations	This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.
WHMIS status	Non-controlled

Inventory status

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

HMIS® ratings

Health: 1
Flammability: 1
Physical hazard: 0

NFPA ratings

Health: 0
Flammability: 1
Instability: 0

Disclaimer

The information in this document was written based on the best knowledge and experience currently available, and is offered for your consideration and guidance when exposed to this product. KLONDIKE Lubricants Corporation disclaim all expressed or implied warranties and assume no responsibilities for the accuracy or completeness of the data contained herein. The data in this document does not apply to use with any other product or in any other process. This document may not be changed, or altered in any way without the expressed knowledge and permission of KLONDIKE Lubricants Corporation.