SAFETY DATA SHEET



1. Identification

Product identifier KLONDIKE Summer Bug Wash

Other means of identification

Product code Bug Wash

Recommended use Windshield Washer Fluid

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

Chemtrec (Within US) **Emergency phone number** 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

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.

Store away from incompatible materials. Storage

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: Causes mild to moderate skin and eye

irritation. May cause respiratory irritation. May cause central nervous system effects. Ingestion of large amounts may cause nausea, vomiting, diarrhea, as well as depression of the central

nervous system. Prolonged or repeated overexposure may cause kidney effects.

Supplemental information None.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
Ammonium Laureth Sulfate	Not Available	32612-48-9	50 - < 60
Propylene Glycol Methyl Ether	Not Available	107-98-2	50 - < 60

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

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4. First-aid measures

Inhalation Move to fresh air. Oxygen or artificial respiration if needed. If symptoms persist, get medical

attention.

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

Rinse immediately with plenty of water for at least 15 minutes. Get medical attention if irritation Eye contact

develops and persists.

Do not induce vomiting. Never give anything by mouth to a victim who is unconscious or is having Ingestion

convulsions. Get medical attention if symptoms occur.

Most important symptoms/effects, acute and

delayed

Causes moderate skin and eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Symptoms may include redness, edema, drying, defatting and cracking of the skin. May cause respiratory irritation. Symptoms may include upper respiratory irritation, coughing, and breathing difficulties. Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting. Ingestion of large amounts may cause nausea,

vomiting, diarrhea, as well as depression of the central nervous system.

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

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

Special protective equipment

and precautions for firefighters Fire-fighting

Move containers from fire area if you can do so without risk.

equipment/instructions

Use standard firefighting procedures and consider the hazards of other involved materials. Specific methods

During fire, gases hazardous to health may be formed.

General fire hazards

No unusual fire or explosion hazards noted. Closed containers may rupture if exposed to excess heat or flame due to a build-up of internal pressure.

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

Hazardous combustion products

Carbon oxides. Hydrocarbons. Hydrogen gas.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Methods and materials for containment and cleaning up Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. For personal protection, see section 8 of the SDS.

This product is miscible in water.

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. Prevent entry into waterways, sewer, basements or confined areas. 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

Avoid prolonged exposure. 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).

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8. Exposure controls/personal protection

Occupational exposure limits

US. ACGIH Threshold Limit Values

Components	Туре	Value	
Propylene Glycol Methyl Ether (CAS 107-98-2)	STEL	100 ppm	
,	TWA	50 ppm	
US. NIOSH: Pocket Guide to Che	emical Hazards		
Components	Туре	Value	
Propylene Glycol Methyl Ether (CAS 107-98-2)	STEL	540 mg/m3	
,		150 ppm	
	TWA	360 mg/m3	
		100 ppm	

Biological limit values

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

Exposure guidelines

US - California OELs: Skin designation

Propylene Glycol Methyl Ether (CAS 107-98-2)

Can be absorbed through the skin.

Appropriate engineering

controls

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Individual protection measures, such as personal protective equipment

Eye/face protection Chemical goggles are recommended. Eye wash facilities and emergency shower must be

available when handling this product.

Skin protection

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

Other Wear appropriate chemical resistant clothing.

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

Appearance

Physical state Liquid.
Form Liquid.
Color Pink.
Odor Mild.

Odor thresholdNot available.pHNot available.Melting point/freezing point0 °C (32 °F)Initial boiling point and boiling99 °C (210.2 °F)

range

Flash point > 120.0 ^oC (> 248 ^oF)

Evaporation rate < 1

Flammability (solid, gas) Not available.

Upper/lower flammability or explosive limits

Flammability limit - lower Not available.

Flammability limit - upper

Not available.

(%)

(%)

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Explosive limit - lower (%) Not available.

Explosive limit - upper (%) Not available.

Vapor pressure Not available.

Vapor density > 1

Relative density Not available.

Solubility(ies)

Solubility (water) Soluble

Partition coefficient Not available.

(n-octanol/water)

Auto-ignition temperature Not available.

Decomposition temperature Not available.

Viscosity Not available.

Other information

Specific gravity 1

10. Stability and reactivity

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

Chemical stabilityMaterial is stable under normal conditions.Possibility of hazardousHazardous polymerization does not occur.

reactions

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. Alkali metals. Halogenated materials. Aldehydes.

Hazardous decomposition

products

No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

Ingestion May cause irritation of the gastrointestinal tract.

Inhalation Prolonged inhalation may be harmful. Irritating to respiratory system.

Skin contact Irritating to skin.

Eye contact Irritating to eyes.

Symptoms related to the physical, chemical and toxicological characteristics

Causes mild to moderate 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 pain, headache, nausea, vomiting, dizziness, drowsiness and other central nervous system effects. Ingestion of large amounts may cause nausea, vomiting, diarrhea, as well as depression of the central nervous

system.

Information on toxicological effects

Acute toxicity See below for individual ingredient acute toxicity data.

Components Species Test Results

Ammonium Laureth Sulfate (CAS 32612-48-9)

AcuteDermal

LD50 Rabbit > 2000 mg/kg

Inhalation

LC50 Rat No data in literature

Oral

LD50 Rat > 2000 mg/kg

Propylene Glycol Methyl Ether (CAS 107-98-2)

Acute Dermal

LD50 Rabbit > 19200 mg/kg

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Components	Species	Test Results
Inhalation		
LC50	Rat	> 5320 ppm
Oral		
LD50	Rat	8532 mg/kg

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

Skin corrosion/irritation May be irritating to the skin. May be irritating to eyes. Serious eve damage/eve

irritation

Respiratory or skin sensitization

Respiratory sensitization Not available.

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 does contain Propylene glycol monomethyl ether acetate (PGMMEA). Commercial

> PGMMEA may contain small amounts of a beta-isomer. beta-PGMMEA may cause teratogenic effects, based on animal data. The potential for these developmental effects to occur for commercial PGMMEA is, however, considered to be low. The level of beta-PGMMEA in this

product is unknown.

Specific target organ toxicity -

single exposure

Product

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.

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

Prolonged or repeated overexposure may cause kidney effects.

Aspiration toxicity Not expected to be an aspiration hazard.

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.

Test Results

KLONDIKE Summer E	Bug Wash (CAS Mi	xture)		
Aquatic				
Acute				
Crustacea	EC50	Daphnia	746 mg/l, 48 hours estimated	
Fish	LC50	Fish	200 mg/l, 96 hours estimated	
Components		Species	Test Results	

Propylene Glycol Methyl Ether (CAS 107-98-2)

Aquatic Acute

Algae EC50 Green algae (Selenastrum > 1000 mg/l, 72 hours

capricornutum)

Species

Crustacea EC50 Water flea (Daphnia magna) 373 mg/l, 48 hours Fish LC50 Japanese rice fish (Oryzias latipes) > 100 mg/l, 96 hours

Chronic

Crustacea NOEC Water flea (Daphnia magna) >= 100 mg/l, 21 days

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

No data available. Bioaccumulative potential 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.

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

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).

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

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.

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)

Propylene Glycol Methyl Ether (CAS 107-98-2) 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)

Immediate Hazard - No **Hazard categories**

> 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

Propylene Glycol Methyl Ether (CAS 107-98-2)

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

Propylene Glycol Methyl Ether (CAS 107-98-2)

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

Propylene Glycol Methyl Ether (CAS 107-98-2)

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
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)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes

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

Toxic Substances Control Act (TSCA) Inventory

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

05-13-2014 Issue date

Version # 01

United States & Puerto Rico

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permission of KLONDIKE Lubricants Corporation.

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Yes

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).