SAFETY DATA SHEET



1. Identification

Product identifier KLONDIKE Ultra Tac EP-2 Grease

Other means of identification

Product code Ultra Tac EP-2

Recommended use Multi-Purpose Grease

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 Skin corrosion/irritation Category 2

Serious eye damage/eye irritation Category 2A

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



Signal word Warning

Hazard statement Causes skin irritation. Causes serious eye irritation.

Precautionary statement

Prevention Wash thoroughly after handling. Wear protective gloves. Wear eye/face protection.

Response If on skin: Wash with plenty of water. If in eyes: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing. Specific treatment (see this label). If skin irritation occurs: Get medical advice/attention. If eye irritation persists: Get medical

advice/attention. Take off contaminated clothing and wash before reuse.

Storage Store away from incompatible materials.

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

Hazard(s) not otherwise classified (HNOC)

d(s) not otherwise Other hazards which do not result in classification: May cause respiratory irritation. May cause

discomfort if swallowed. Prolonged or repeated overexposure may cause liver and kidney effects.

Supplemental information None.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
Distillates (petroleum),	HYDROTREATED HEAVY NAPHTHENIC	64742-52-5	80 - < 90
Hydrotreated Heavy Naphthenic	DISTILLATE (PETROLEUM)		

Chemical name	Common name and synonyms	nd synonyms CAS number		
Antimony Dithiocarbmate	Antimony, tris(dipentylcarbamodithioato-S,S)-, (oc-6-11)- Tris(dipentyldithiocarbamato-S,S')antimony	15890-25-2	5 - < 10	
Distillates (petroleum), Hydrotreated Middle	HYDROTREATED MIDDLE DISTILLATE (PETROLEUM)	64742-46-7	5 - < 10	
Lithium Hydroxide	Not Available	1310-66-3	3 - < 5	
Sebacic Acid	Decan-1,10-dioic acid Decanedioic acid	111-20-6	3 - < 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. If breathing is difficult, give oxygen. If breathing stops, provide artificial

respiration. Get medical attention if symptoms persist.

Skin contact IF ON SKIN: Gently wash with plenty of soap and water. Duration of rinsing should be at least 15

minutes. Get medical attention if symptoms occur. Wash contaminated clothing before reuse.

Eye contact IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present

and easy to do. Continue rinsing. Duration of rinsing should be at least 15 minutes. If eye irritation

persists: Get medical advice/attention.

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

convulsions. Get medical attention if any discomfort continues.

Most important symptoms/effects, acute and

delayed

May cause moderate to severe 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 upper respiratory irritation, coughing, and breathing difficulties. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Indication of immediate medical attention and special treatment needed

Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.

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

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

During fire, gases hazardous to health may be formed.

Special protective equipment

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

and precautions for firefighters
Fire fighting

Wear suitable protective equipment. Ventilate the contaminated area. Use water spray to cool unopened containers. 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

equipment/instructions

media

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

Carbon oxides. Lithium oxides Hydrocarbons. Sulphur oxides. Phosphorus oxides. Nitrogen oxides (NOx). Other irritating fumes and smoke.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Avoid inhalation of vapors and spray mists. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. 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

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

Large Spills: Stop leak if you can do so without risk. Dike the spilled material, where this is possible. 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 spill with vermiculite or other inert material. Place in clean, dry and labeled 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. In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations.

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. Avoid breathing mist or vapor. Avoid contact with eyes, skin, and clothing. When using, do not eat, drink or smoke. Do not use in areas without adequate ventilation. Water quenching is good practice. Wash hands thoroughly after handling. Avoid release to the environment. Do not empty into drains. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities

Store locked up. Keep away from heat, sparks and open flame. Keep container tightly closed. Store in tightly closed original container in a dry, cool and well-ventilated place. Store away from incompatible materials (see Section 10 of the SDS). Keep away from food, drink and animal feedingstuffs. Keep out of the reach of children. Use care in handling/storage. Storage area should be clearly identified, clear of obstruction and accessible only to trained and authorized personnel.

8. Exposure controls/personal protection

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

Occupational exposure limits

Components	Туре	Value	Form
Antimony Dithiocarbmate (CAS 15890-25-2)	PEL	0.5 mg/m3	
Distillates (petroleum), Hydrotreated Heavy Naphthenic (CAS 64742-52-5)	PEL	5 mg/m3	Mist.
		2000 mg/m3	
		500 ppm	
Distillates (petroleum), Hydrotreated Middle (CAS 64742-46-7)	PEL	5 mg/m3	Mist.
US. ACGIH Threshold Limit Value	s		
Components	Туре	Value	
Antimony Dithiocarbmate (CAS 15890-25-2)	TWA	0.5 mg/m3	
US. NIOSH: Pocket Guide to Chen	nical Hazards		
Components	Туре	Value	Form
Antimony Dithiocarbmate (CAS 15890-25-2)	TWA	0.5 mg/m3	
Distillates (petroleum), Hydrotreated Heavy Naphthenic (CAS 64742-52-5)	STEL	10 mg/m3	Mist.
017 12 02 0)	TWA	5 mg/m3	Mist.
Distillates (petroleum), Hydrotreated Middle (CAS 64742-46-7)	STEL	10 mg/m3	Mist.
,	TWA	5 mg/m3	Mist.
US. Workplace Environmental Exp	oosure Level (WEEL) Guides		
Components	Туре	Value	
Lithium Hydroxide (CAS 1310-66-3)	Ceiling	1.8 mg/m3	

Biological limit values

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

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 Wear safety glasses with side shields (or goggles). A full face shield may also be necessary.

Provide an emergency eye wash fountain and quick drench shower in the immediate work area.

Skin protection

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

Other Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended.

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 stateLiquid.FormLiquid.ColorRed.

Odor Mild petroleum odor.

Odor threshold Not available.

pH Not available.

Melting point/freezing point Not available.

Initial boiling point and boiling > 300 °C (572 °F)

range

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.

Not available.

Explosive limit - lower (%) Not available.

Explosive limit - upper (%) Not available.

Vapor pressure < 0.01 mm Hg

Vapor density Heavier than air

Relative density Solubility(ies)

Solubility (water) Not available.

Partition coefficient Not available.

(n-octanol/water)

Auto-ignition temperatureNot available.Decomposition temperatureNot available.Viscosity336 cSt

Other information

Specific gravity 0.92

10. Stability and reactivity

ReactivityThe 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

Hazardous polymerization does not occur.

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

areas without adequate ventilation.

Strong oxidizing agents.

Incompatible materials

Hazardous decomposition

products

None known, refer to hazardous combustion products in Section 5.

11. Toxicological information

Information on likely routes of exposure

InhalationMay cause irritation to the respiratory system.Skin contactMay cause moderate to severe skin irritation.Eye contactMay cause moderate to severe eye irritation.

Ingestion May cause discomfort if swallowed.

Most important symptoms/effects, acute and

delayed

May cause moderate to severe 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 upper respiratory irritation, coughing, and breathing difficulties. Ingestion may cause gastrointestinal

irritation, nausea, vomiting and diarrhea.

Information on toxicological effects

Acute toxicity This product is not classified as an acute toxicity hazard.

See below for individual ingredient acute toxicity data.

Components Species Test Results

Antimony Dithiocarbmate (CAS 15890-25-2)

Acute

Dermal

LD50 Rabbit > 16000 mg/kg

Inhalation

LC50 Rat No data in literature

Oral

LD50 Rat > 16400 mg/kg

Distillates (petroleum), Hydrotreated Heavy Naphthenic (CAS 64742-52-5)

Acute

Dermal

LD50 Rabbit > 2000 mg/kg

Inhalation

LC50 Rat > 5.23 mg/l, 4 hours Mist

Oral

LD50 Rat > 5000 mg/kg

Distillates (petroleum), Hydrotreated Middle (CAS 64742-46-7)

Acute

Dermal

LD50 Rabbit > 2000 mg/kg

Inhalation

LC50 Rat 4.6 mg/l, 4 Hours (Mist)

Oral

LD50 Rat > 5000 mg/kg

Lithium Hydroxide (CAS 1310-66-3)

Acute

Dermal

LD50 Rabbit No Data in Literature

Material name: KLONDIKE Ultra Tac EP-2 Grease 2159 Version #: 02 Issue date: 01-09-2017

Components	Species Test Results	
Inhalation		
LC50	Rat	> 3.4 mg/l/4h
Sebacic Acid (CAS 111-20-6	3)	
Acute		
Dermal		
LD50	Rabbit	> 2000 mg/kg
Inhalation		
LC50	Rat	> 4.5 mg/l, 4 hours
Oral		
LD50	Rat	14375 mg/kg

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

Skin corrosion/irritation May cause moderate to severe skin irritation.

Serious eye damage/eye

irritation

May cause moderate to severe eye irritation.

Respiratory or skin sensitization

Respiratory sensitization Not expected to be a respiratory sensitizer.

Skin sensitizer This product is not expected to cause skin sensitization.

Germ cell mutagenicityNo data available to indicate product or any components present at greater than 0.1% are

mutagenic or genotoxic.

Carcinogenicity Not classifiable as to carcinogenicity to humans. Highly refined mineral oils are not classified as

carcinogenic by the International Agency for Research on Cancer (IARC). The highly refined

mineral oils in this product contain <3% (w/w) DMSO-extract, according to IP346

IARC Monographs. Overall Evaluation of Carcinogenicity

Distillates (petroleum), Hydrotreated Middle (CAS 1 Carcinogenic to humans.

64742-46-7)

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.

Aspiration toxicity Not expected to be an aspiration hazard.

Chronic effects Prolonged or repeated overexposure may cause liver and kidney effects.

Species

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

Components of this product are hazardous to aquatic life.

Distillates (petroleum), Hydrotreated Heavy Naphthenic (CAS 64742-52-5)

Aquatic

Acute

Components

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

Chronic

Algae NOEL Green Algae (Pseudokirchneriella > 100 mg/l, 72 hours

subcapitata)

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

Material name: KLONDIKE Ultra Tac EP-2 Grease 2159 Version #: 02 Issue date: 01-09-2017

Components		Species	Test Results	
Distillates (petroleum),	Hydrotreated Midd	lle (CAS 64742-46-7)		
Aquatic				
Acute				
Algae	EC50	Green Algae (Pseudokirchneriella subcapitata)	1.714 mg/l, 72 hours	
Crustacea	EC50	Water flea (Daphnia magna)	7.385 mg/l, 48 hours	
Fish	LC50	Rainbow trout, donaldson trout (Oncorhynchus mykiss)	1.13 mg/l, 96 hours	
Chronic				
Crustacea	NOEC	Water flea (Daphnia magna)	0.163 mg/l, 21 days	
Lithium Hydroxide (CA	S 1310-66-3)			
Aquatic				
Acute				
Algae	EC50	Green algae (Selenastrum capricornutum)	41.62 mg/l, 72 hours	
Crustacea	EC50	Water flea (Daphnia magna)	19.1 mg/l, 48 hours	
Fish	LC50	Zebra danio (Danio rerio)	90 mg/l, 96 hours	
Chronic				
Algae	NOEC	Green algae (Selenastrum capricornutum)	10 mg/l, 72 hours	
Crustacea	NOEC	Water flea (Daphnia magna)	2.3 mg/l, 21 days	
Sebacic Acid (CAS 111-20-6)				
Aquatic				
Acute				
Algae	EC50	Green algae (Selenastrum capricornutum)	38.7 mg/l, 72 hours	
Crustacea	EC50	Water flea (Daphnia magna)	> 100 mg/l, 48 hours	
Fish	LC50	Zebrafish (Brachydanio rerio)	> 100 mg/l, 96 hours	
Chronic			-	
Algae	NOEC	Green algae (Selenastrum capricornutum)	3 mg/l, 72 hours	

^{*} 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 The product itself has not been tested.

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 instructionsCollect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of

contents/container in accordance with local/regional/national/international regulations.

Local disposal regulations Dispose in accordance with all applicable regulations.

Hazardous waste codeThe 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 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)

Antimony Dithiocarbmate (CAS 15890-25-2)

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)

Hazard categories Immediate Hazard - Yes

Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous

chemical

INO

SARA 313 (TRI reporting)

Chemical name	CAS number	% by wt.
Antimony Dithiocarbmate	15890-25-2	5 - < 10

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Antimony Dithiocarbmate (CAS 15890-25-2)

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. California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100)

Not listed.

US. Massachusetts RTK - Substance List

Distillates (petroleum), Hydrotreated Heavy Naphthenic (CAS 64742-52-5)

Distillates (petroleum), Hydrotreated Middle (CAS 64742-46-7)

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

Antimony Dithiocarbmate (CAS 15890-25-2)

Lithium Hydroxide (CAS 1310-66-3)

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

Distillates (petroleum), Hydrotreated Middle (CAS 64742-46-7)

US. Rhode Island RTK

Antimony Dithiocarbmate (CAS 15890-25-2)

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

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	Yes

⁽PICCS)

Toxic Substances Control Act (TSCA) Inventory

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

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

Inventory name

Issue date 01-09-2017

Version # 02

United States & Puerto Rico

Disclaimer Klondike cannot anticipate all conditions under which this information and its product, or the

products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in the

sheet was written based on the best knowledge and experience currently available.

Material name: KLONDIKE Ultra Tac EP-2 Grease 2159 Version #: 02 Issue date: 01-09-2017

On inventory (yes/no)*

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).