

#### **SAFETY DATA SHEET**

1. Identification KLONDIKE Syn Tac EP-00 Synthetic Grease

Product identifier

Syn Tac EP-00 Synthetic Grease

Other means of identification Product code

Multi-purpose grease

Recommended use

No restrictions on use known.

Recommended restrictions

Petroleum hydrocarbon

Chemical family Manufacturer

KLONDIKE Lubricants Corporation

3078 275th Street Langley, BC, Canada

V4W 3L4

### Section 2. Hazards identification

OSHA/HCS status : While this material is not considered hazardous by the OSHA Hazard Communication

Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available

for employees and other users of this product.

Classification of the substance or mixture

: Not classified.

Percentage of the mixture consisting of ingredient(s) of unknown oral toxicity: 38.7% Percentage of the mixture consisting of ingredient(s) of unknown dermal toxicity: 58.7% Percentage of the mixture consisting of ingredient(s) of unknown inhalation toxicity: 58.

7%

**GHS** label elements

Signal word : No signal word.

**Hazard statements** : No known significant effects or critical hazards.

**Precautionary statements** 

Prevention:NotResponseapplicable. :NotStorageapplicable. :NotDisposalapplicable. :NotHazards not otherwiseapplicable. ::

classified None known.

Material name: KLONDIKE Syn Tac EP-00 Synthetic Grease

Version #: 1 Issue date:02-09-2018

# Section 3. Composition/information on ingredients

Substance/mixture :
Other means of :

: Mixture

: Not available.

identification

Ingredient name	%	CAS number
Dec-1-ene, homopolymer, hydrogenated Dec-1-ene, oligomers, hydrogenated	≥25 - ≤50	68037-01-4
1-Dodecene, polymer with 1-decene and 1-octene, hydrogenated trioctyl borate	≥10 - ≤25 ≤3	163149-28-8 2467-12-1

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

### Section 4. First aid measures

#### **Description of necessary first aid measures**

**Eye contact**: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower

eyelids. Check for and remove any contact lenses. Get medical attention if irritation

occurs.

**Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get

medical attention if symptoms occur. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under

medical surveillance for 48 hours.

**Skin contact**: Flush contaminated skin with plenty of water. Remove contaminated clothing and

shoes. Get medical attention if symptoms occur.

**Ingestion**: Wash out mouth with water. Remove victim to fresh air and keep at rest in a position

comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.

#### Most important symptoms/effects, acute and delayed

#### Potential acute health effects

Eye contact: No known significant effects or critical Inhalation hazards.: No known significant effects or critical Skin contact hazards.: No known significant effects or critical Ingestion hazards.: No known significant effects or critical

#### Over-exposure signs/symptomes ands.

Eye contact : No specific data.
Inhalation : No specific data.
Skin contact : No specific data.
Ingestion : No specific data.

#### Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician : In case of inhalation of decomposition products in a fire, symptoms may be delayed.

The exposed person may need to be kept under medical surveillance for 48 hours. :

Specific treatments No specific treatment.

**Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training.

### Section 4. First aid measures

See toxicological information (Section 11)

## Section 5. Fire-fighting measures

#### **Extinguishing media**

Suitable extinguishing

media

: Use an extinguishing agent suitable for the surrounding fire.

Unsuitable extinguishing

media

: None known.

Specific hazards arising from the

chemical thermal decomposition products : No specific fire or explosion hazard.

: Decomposition products may include the following materials: carbon dioxide

carbon monoxide nitrogen oxides sulfur oxides phosphorus oxides metal oxide/oxides

Special protective actions for fire-fighters

: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

### Section 6. Accidental release measures

#### Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.

For emergency responders: If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

**Environmental precautions** 

: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

#### Methods and materials for containment and cleaning up

Small spill

: Move containers from spill area. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.

Large spill

: Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

## Section 7. Handling and storage

#### Precautions for safe handling

Protective measures

: Put on appropriate personal protective equipment (see Section 8).

Advice on general occupational hygiene : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

including any incompatibilities

Conditions for safe storage, : Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

## Section 8. Exposure controls/personal protection

#### **Control parameters**

#### Occupational exposure limits

Ingredient name	Exposure limits
Dec-1-ene, homopolymer, hydrogenated Dec-1-ene, oligomers, hydrogenated	None.
1-Dodecene, polymer with 1-decene and 1-octene, hydrogenated	None.
trioctyl borate	None.

Appropriate engineering controls

: Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

**Environmental exposure** controls

: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

#### Individual protection measures

**Hygiene measures** 

: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection

: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with sideshields.

#### **Skin protection**

Hand protection

: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

#### **Body protection**

: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

### Section 8. Exposure controls/personal protection

Other skin protection : Appropriate footwear and any additional skin protection measures should be selected

based on the task being performed and the risks involved and should be approved by

a specialist before handling this product.

**Respiratory protection**: Based on the hazard and potential for exposure, select a respirator that meets the

appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important

aspects of use.

## Section 9. Physical and chemical properties

**Appearance** 

Physical state : Solid.
Color : Red.

Odor : Characteristic.
pH : Not applicable.
Melting point : Not available.
Boiling point : Not
Flash point available. : Not
Evaporation rate : Not

Flammability (solid, gas) available in the presence of the following materials or conditions: open flames, sparks

and static discharge.

Slightly flammable in the presence of the following materials or conditions: heat.

Lower and upper explosive

(flammable) limits

: Not available.

Vapor pressure : Not available.
Vapor density : Not available.
Density : 0.9 g/cm³

**Solubility** : Insoluble in the following materials: cold water and hot water.

Partition coefficient: n-

octanol/water

: Not available.

Auto-ignition temperature : Not available.

Decomposition temperature : Not available.

Viscosity : Kinematic (40°C (104°F)): >0.21 cm²/s (>21 cSt)

## Section 10. Stability and reactivity

**Reactivity**: No specific test data related to reactivity available for this product or its ingredients.

**Chemical stability**: The product is stable.

Possibility of hazardous

reactions

: Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to avoid : No specific data.

**Incompatible materials**: No specific data.

Hazardous decomposition

products

: Under normal conditions of storage and use, hazardous decomposition products should

not be produced.

## **Section 11. Toxicological information**

#### Information on toxicological effects

**Acute toxicity** 

**Conclusion/Summary**: No known significant effects or critical hazards.

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
trioctyl borate	Eyes - Moderate irritant	Rabbit	-	100 milligrams	-

Conclusion/Summary

Skin: No known significant effects or criticalEyeshazards. : No known significant effects or criticalRespiratoryhazards. : No known significant effects or critical

Sensitization hazards.

**Conclusion/Summary** 

**Skin**: No specific information is available in our database regarding the skin sensitizing

properties of this product. Sensitization not suspected for humans.

**Respiratory** : Sensitization not suspected for humans.

<u>Mutagenicity</u>

**Conclusion/Summary**: There are no data available on the mixture itself. Mutagenicity not suspected for

humans

Carcinogenicity

Conclusion/Summary : There are no data available on the mixture itself. Carcinogenicity not suspected for

humans

Reproductive toxicity

Conclusion/Summary : There are no data available on the mixture itself. Not considered to be dangerous to

humans, according to our database.

**Teratogenicity** 

**Conclusion/Summary**: There are no data available on the mixture itself. Teratogenicity not suspected for

humans.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

#### **Aspiration hazard**

Name	Result
Dec-1-ene, homopolymer, hydrogenated Dec-1-ene, oligomers,	ASPIRATION HAZARD - Category 1
hydrogenated 1-Dodecene, polymer with 1-decene and 1-octene,	ASPIRATION HAZARD - Category 1
hydrogenated	

Information on the likely

routes of exposure

: Routes of entry anticipated: Oral, Dermal.

Potential acute health effects

Eye contact: No known significant effects or critical Inhalation hazards.: No known significant effects or critical Skin contact hazards.: No known significant effects or critical Ingestion hazards.: No known significant effects or critical

hazards.

Material name: KLONDIKE Syn Tac EP-00 Synthetic Grease

SDS US

## **Section 11. Toxicological information**

#### Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : No specific data.
Inhalation : No specific data.
Skin contact : No specific data.
Ingestion : No specific data.

#### Delayed and immediate effects and also chronic effects from short and long term exposure

#### **Short term exposure**

Potential immediate

: Not available.

effects

Potential delayed effects: Not available.

Long term exposure

Potential immediate

: Not available.

effects

Potential delayed effects : Not available.

#### Potential chronic health effects

Conclusion/Summary: No known significant effects or critical hazards.: No known significant effects or critical

hazards.

#### **Numerical measures of toxicity**

#### **Acute toxicity estimates**

Route	ATE value
Oral	267033.6 mg/kg

## **Section 12. Ecological information**

#### **Toxicity**

**Conclusion/Summary**: There are no data available on the mixture itself.

Persistence and degradability

Conclusion/Summary : This product has not been tested for biodegradation. Not expected to be rapidly

degradable.

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
MC 2700ER	-	-	Not readily

#### **Bioaccumulative potential**

Product/ingredient name	LogPow	BCF	Potential
Dec-1-ene, homopolymer, hydrogenated Dec-1-ene, oligomers, hydrogenated	>6.5	-	high
1-Dodecene, polymer with 1-decene and 1-octene, hydrogenated	>6.5	-	high

#### **Mobility in soil**

## **Section 12. Ecological information**

Soil/water partition coefficient (Koc)

: Not available.

Other adverse effects : No known significant effects or critical hazards.

## Section 13. Disposal considerations

Disposal methods

: The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

## **Section 14. Transport information**

	DOT Classification	TDG Classification	Mexico Classification	ADR/RID	IMDG	IATA
UN number	Not regulated.	Not regulated.	Not regulated.	Not regulated.	Not regulated.	Not regulated.
UN proper shipping name	-	-	-	-	-	-
Transport hazard class(es)	-	-	-	-	-	-
Packing group	-	-	-	-	-	-
Environmental hazards	No.	No.	No.	No.	No.	No.

Special precautions for user : Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according to Annex II of MARPOL and

: Not available.

the IBC Code

## Section 15. Regulatory information

U.S. Federal regulations

: TSCA 8(a) CDR Exempt/Partial exemption: Not determined

Clean Water Act (CWA) 307: Phosphorodithioic acid, mixed O,O-bis(iso-Bu and pentyl)

esters, zinc salts

Clean Air Act Section 112 : Not listed

(b) Hazardous Air Pollutants (HAPs)

Clean Air Act Section

602 Class I Substances

: Not listed

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SDS US

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### **Section 15. Regulatory information**

Clean Air Act Section 602 Class II Substances : Not listed

DEA List I Chemicals

: Not listed

(Precursor Chemicals)

DEA List II Chemicals

: Not listed

(Essential Chemicals)

#### **SARA 302/304**

#### **Composition/information on ingredients**

No products were found.

SARA 304 RQ : Not applicable.

**SARA 311/312** 

Classification : Not applicable.

Composition/information on ingredients

Name	%	Classification	
Dec-1-ene, homopolymer, hydrogenated Dec-1-ene, oligomers, hydrogenated	≥25 - ≤50	ASPIRATION HAZARD - Category 1	
1-Dodecene, polymer with 1-decene and 1-octene, hydrogenated	≥10 - ≤25	ASPIRATION HAZARD - Category 1	
trioctyl borate	≤3	EYE IRRITATION - Category 2A	

#### **SARA 313**

	Product name	CAS number	%
Form R - Reporting requirements	Phosphorodithioic acid, mixed O,O-bis(iso-Bu and pentyl) esters, zinc salts	68457-79-4	1-5
Supplier notification	Phosphorodithioic acid, mixed O,O-bis(iso-Bu and pentyl) esters, zinc salts	68457-79-4	1-5

#### State regulations

Massachusetts : None of the components are listed.

New York : None of the components are listed.

New Jersey : The following components are listed: ZINC compounds
Pennsylvania : The following components are listed: ZINC COMPOUNDS

California Prop. 65

None of the components are listed.

#### International regulations

#### Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

#### Montreal Protocol (Annexes A, B, C, E)

Not listed.

#### **Stockholm Convention on Persistent Organic Pollutants**

Not listed.

#### Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

#### **UNECE Aarhus Protocol on POPs and Heavy Metals**

### Section 15. Regulatory information

Not listed.

**Inventory list** 

Australia Canada : All components are listed or exempted.

China : At least one component is not listed in DSL but all such components are listed in

Europe NDSL.: All components are listed or exempted.

**Japan** : All components are listed or exempted.

**New Zealand** : Not determined.

**Philippines** components are listed Republic of Korea exempted.: All components are listed or **Taiwan** exempted.: All components are listed or **United States** exempted.: All components are listed or

exempted.: All components are listed or

# Section 16. Other information

#### **Hazardous Material Information System (U.S.A.)**



Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings and the associated label are not required on SDSs or products leaving a facility under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered trademark and service mark of the American Coatings Association, Inc.

The customer is responsible for determining the PPE code for this material. For more information on HMIS® Personal Protective Equipment (PPE) codes, consult the HMIS® Implementation Manual.

#### **National Fire Protection Association (U.S.A.)**



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Copyright ©2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.

#### Procedure used to derive the classification

Classification	Justification
Not classified.	

#### History

Date of issue/Date : 02/09/2087

of revision

## **Section 16. Other information**

Date of previous issue : 02/09/2087

Version : 1

**Key to abbreviations** : ATE = Acute Toxicity Estimate

BCF = Bioconcentration Factor

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

IATA = International Air Transport Association

IBC = Intermediate Bulk Container

IMDG = International Maritime Dangerous Goods

LogPow = logarithm of the octanol/water partition coefficient

MARPOL = International Convention for the Prevention of Pollution From Ships, 1973

as modified by the Protocol of 1978. ("Marpol" = marine pollution)

UN = United Nations

**References**: Not available.

**▼** Indicates information that has changed from previously issued version.

#### Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.