

KLONDIKE ISO 320 EP Industrial Gear Lubricant

1 Identification**Product identifier****Product name** KLONDIKE ISO 320 EP Industrial Gear Lubricant**Other means of identification****Product Code(s)****Synonyms****Recommended use of the chemical and restrictions on use****Recommended Use** Lubricant.**Uses advised against** No information available**Details of the supplier of the safety data sheet****Manufacturer Address**KLONDIKE Lubricants Corporation 3078 275th Street Langley,
BC, V4W 3L4 Canada
General information 1-877-293-4691
info@klondikelubricants.com**Emergency Contact:**Chemtrec (Within US) 1-800-424-9300 Chemtrec
(International) 1-703-527-3887**2 Hazard identification****Classification of the hazardous product:**

Not classified under GHS

Hazard statements: Not applicable**Other hazards known to the supplier with respect to the hazardous product:****Physical hazards not otherwise classified** None known.**Health hazards not otherwise classified** None known.**3 Composition/information on ingredients**

Chemical Name	Common name and synonyms	CAS registry number and any unique identifiers	Concentration
Amines, C12-14-tert-alkyl	No data available	68955-53-3	0.1 - 1
Highly refined synthetic base stocks	No data available	64742-54-7	0.1 - 1
Residual oils (petroleum), solvent dewaxed	No data available	64742-62-7	30 - 60
Petroleum distillates, hydrotreated	No data available	64742-54-7	30 - 60

heavy paraffinic			
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4 First-aid measures

Inhalation:	Remove to fresh air. If breathing is difficult, have a trained individual administer oxygen.
Eye contact:	No data available
Skin Contact:	Wash with soap and water. Get medical attention if irritation develops or persists.
Ingestion:	No hazard in normal industrial use. Do not induce vomiting. Seek medical attention if symptoms develop. Provide medical care provider with this SDS.
The most important symptoms and effects, whether acute or delayed:	None known.
An indication of immediate medical attention and special treatment needed, if necessary:	No additional first aid information available.

5 Fire-fighting measures

Suitable extinguishing media:	Use alcohol resistant foam, carbon dioxide, or dry chemical when fighting fires. Water or foam may cause frothing if liquid is burning but it still may be a useful extinguishing agent if carefully applied to the surface of the fire. Do not direct a stream of water into the hot burning liquid.
Unsuitable extinguishing media:	No data available
Specific hazards arising from the hazardous product, such as the nature of any hazardous combustion:	Material may be ignited only if preheated to temperatures above the high flash point, for example in a fire.
Hazardous Combustion Products:	Nitrogen containing gases, Carbon dioxide
Special protective equipment and precautions for firefighters:	Do not enter fire area without proper protection including self-contained breathing apparatus and full protective equipment. Use methods for the surrounding fire.

6 Accidental release measures

Personal precautions, protective equipment and emergency procedures:	No health affects expected from the clean up of this material if contact can be avoided. Follow personal protective equipment recommendations found in Section 8 of this SDS.
Methods and materials for containment and cleaning up:	No special spill clean up considerations. Collect and discard in regular trash.

7 Handling and storage

Precautions for safe handling:	Mildly irritating material. Avoid unnecessary exposure.
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Conditions for safe storage:
Materials to Avoid/Chemical Incompatibility:

Store in a cool dry place. Isolate from incompatible materials.
Acids, Oxidizing materials

8 Exposure controls/personal protection

Control parameters, including occupational exposure limit values or biological limit values and the source of those values:

Canada – Alberta – Occupational Exposure Limits:

Chemical Name	Occupational Exposure Limits - TWAs	Occupational Exposure Limits - STELs	Occupational Exposure Limits - Ceiling
Petroleum distillates, hydrotreated heavy paraffinic	5 mg/m ³ TWA	10 mg/m ³ STEL	No data available
Highly refined synthetic base stocks	5 mg/m ³ TWA	10 mg/m ³ STEL	No data available

Canada – British Columbia – Occupational Exposure Limits:

Chemical Name	Occupational Exposure Limits - TWAs	Occupational Exposure Limits - STELs	Occupational Exposure Limits - Ceiling
Petroleum distillates, hydrotreated heavy paraffinic	0.2 mg/m ³ TWA (mildly refined); 1 mg/m ³ TWA (severely refined)	No data available	No data available
Highly refined synthetic base stocks	0.2 mg/m ³ TWA (mildly refined); 1 mg/m ³ TWA (severely refined)	No data available	No data available

Canada – Manitoba – Occupational Exposure Limits:

Chemical Name	Occupational Exposure Limits - TWAs	Occupational Exposure Limits - STELs	Occupational Exposure Limits - Ceiling
Petroleum distillates, hydrotreated heavy paraffinic	5 mg/m ³ TWA	No data available	No data available
Highly refined synthetic base stocks	5 mg/m ³ TWA	No data available	No data available

Canada – New Brunswick – Occupational Exposure Limits:

Chemical Name	Occupational Exposure Limits - TWAs	Occupational Exposure Limits - STELs	Occupational Exposure Limits - Ceiling
Petroleum distillates,	5 mg/m ³ TWA	10 mg/m ³ STEL	No data available

hydrotreated heavy paraffinic			
Highly refined synthetic base stocks	5 mg/m ³ TWA	10 mg/m ³ STEL	No data available

Canada – Newfoundland & Labrador – Occupational Exposure Limits:

Chemical Name	Occupational Exposure Limits - TWAs	Occupational Exposure Limits - STELs	Occupational Exposure Limits - Ceiling
Petroleum distillates, hydrotreated heavy paraffinic	5 mg/m ³ TWA	No data available	No data available
Highly refined synthetic base stocks	5 mg/m ³ TWA	No data available	No data available

Canada – Northwest Territories – Occupational Exposure Limits:

Chemical Name	Occupational Exposure Limits - TWAs	Occupational Exposure Limits - STELs	Occupational Exposure Limits - Ceiling
Petroleum distillates, hydrotreated heavy paraffinic	5 mg/m ³ TWA	10 mg/m ³ STEL	No data available
Highly refined synthetic base stocks	5 mg/m ³ TWA	10 mg/m ³ STEL	No data available

Canada – Nova Scotia – Occupational Exposure Limits:

Chemical Name	Occupational Exposure Limits - TWAs	Occupational Exposure Limits - STELs	Occupational Exposure Limits - Ceiling
Petroleum distillates, hydrotreated heavy paraffinic	5 mg/m ³ TWA	No data available	No data available
Highly refined synthetic base stocks	5 mg/m ³ TWA	No data available	No data available

Canada – Nunavut – Occupational Exposure Limits:

Chemical Name	Occupational Exposure Limits - TWAs	Occupational Exposure Limits - STELs	Occupational Exposure Limits - Ceiling
Petroleum distillates, hydrotreated heavy paraffinic	5 mg/m ³ TWA	10 mg/m ³ STEL	No data available
Highly refined synthetic base stocks	5 mg/m ³ TWA	10 mg/m ³ STEL	No data available

Canada – Ontario – Occupational Exposure Limits:

Chemical Name	Occupational Exposure Limits - TWAs	Occupational Exposure Limits - STELs	Occupational Exposure Limits - Ceiling
Petroleum distillates,	5 mg/m ³ TWA	No data available	No data available

hydrotreated heavy paraffinic			
Highly refined synthetic base stocks	5 mg/m ³ TWA	No data available	No data available

Canada – Prince Edward Island – Occupational Exposure Limits:

Chemical Name	Occupational Exposure Limits - TWAs	Occupational Exposure Limits - STELs	Occupational Exposure Limits - Ceiling
Petroleum distillates, hydrotreated heavy paraffinic	5 mg/m ³ TWA	No data available	No data available
Highly refined synthetic base stocks	5 mg/m ³ TWA	No data available	No data available

Canada – Quebec – Occupational Exposure Limits:

Chemical Name	Occupational Exposure Limits - TWAEVs	Occupational Exposure Limits - STEVs	Occupational Exposure Limits - Ceiling
Petroleum distillates, hydrotreated heavy paraffinic	No data available	No data available	No data available
Highly refined synthetic base stocks	No data available	No data available	No data available

Canada – Saskatchewan – Occupational Exposure Limits:

Chemical Name	Occupational Exposure Limits - TWAs	Occupational Exposure Limits - STELs	Occupational Exposure Limits - Ceiling
Petroleum distillates, hydrotreated heavy paraffinic	5 mg/m ³ TWA	10 mg/m ³ STEL	No data available
Highly refined synthetic base stocks	5 mg/m ³ TWA	10 mg/m ³ STEL	No data available

Canada - Yukon – Occupational Exposure Limits:

Chemical Name	Occupational Exposure Limits - TWAs	Occupational Exposure Limits - STELs	Occupational Exposure Limits - Ceiling
Petroleum distillates, hydrotreated heavy paraffinic	5 mg/m ³ TWA	10 mg/m ³ STEL	No data available
Highly refined synthetic base stocks	5 mg/m ³ TWA	10 mg/m ³ STEL	No data available

Chemical Name	OSHA PEL	ACGIH TLV-TWA	ACGIH STEL	IDLH
Petroleum distillates, hydrotreated heavy paraffinic	5 mg/m ³ TWA	5 mg/m ³ TWA	10 mg/m ³ STEL	No data available
Highly refined synthetic base stocks	5 mg/m ³ TWA	5 mg/m ³ TWA	10 mg/m ³ STEL	No data available

Appropriate engineering controls:	Use local exhaust ventilation or other engineering controls to minimize exposures and maintain operator comfort.
Individual protection measures, such as personal protective equipment:	
Respiratory Protection:	Respiratory protection may be required to avoid overexposure when handling this product. General or local exhaust ventilation is the preferred means of protection. Use a respirator if general room ventilation is not available or sufficient to eliminate symptoms.
Respirator Type(s):	None required where adequate ventilation is provided. If airborne concentrations are above the applicable exposure limits, use NIOSH/MSHA approved respiratory protection.
Eye and face protection:	Wear safety glasses when handling this product if there is a likelihood of contact with eyes.
Skin Protection:	Where use can result in skin contact, practice good personal hygiene and wear impervious gloves. Wash hands and other exposed areas with mild soap and water before eating, drinking, and when leaving work.
Hand protection:	Neoprene, Nitrile
General hygiene conditions:	No data available

9 Physical and chemical properties

Physical state:	Liquid
Colour:	Amber
Odour:	Mild Petroleum
Odour threshold:	Not determined
pH:	No data available
Melting point (°C):	No data available
Freezing point (°C):	No data available
Initial boiling point and boiling range (°C):	No data available
Flash point (°C):	232
Evaporation rate:	No data available
Flammability, in the case of solids and gases:	No data available
Upper flammable or explosive limit, % in air:	Not established
Lower flammable or explosive limit, % in air:	Not established
Vapour pressure:	No data available
Vapour density:	No data available
Relative density:	0.88
Solubility:	Insoluble
Partition coefficient — n-octanol/water:	No data available

Auto-ignition temperature (°C):	No data available
Decomposition temperature (°C):	Not determined
Viscosity:	219.6

10 Stability and reactivity

Reactivity:	There are no known reactivity hazards associated with this product.
Chemical stability:	Stable under normal conditions.
Possibility of hazardous reactions:	None expected under standard conditions of storage.
Conditions to avoid, including static discharge, shock or vibration:	Temperatures above the high flash point of this combustible material in combination with sparks, open flames, or other sources of ignition. Moisture (will lead to product performance degradation).
Incompatible materials:	Acids Oxidizing materials
Hazardous decomposition products:	Nitrogen containing gases Carbon dioxide

11 Toxicological information

Information on the likely routes of exposure (inhalation, ingestion, skin and eye contact):	Eye contact, Ingestion, Inhalation, Skin contact
Symptoms related to the physical, chemical and toxicological characteristics:	None known.
Immediate effects from short term exposure:	
Inhalation:	Likely to be practically non-toxic based on animal data. No hazard in normal industrial use.
Skin Contact:	Can cause minor skin irritation, defatting, and dermatitis.
Eye Contact:	This material is likely to be non-irritating to eyes based on animal data.
Ingestion:	Estimated to be > 5.0 g/kg. No hazard in normal industrial use.
Delayed and chronic effects from long term exposure:	
Carcinogenicity:	Not expected to cause cancer. This product meets the IP-346 criteria of <3% PAH's and is not considered a carcinogen by the International Agency for Research on Cancer.
Reproductive and Developmental Toxicity:	Not known or reported to cause reproductive or developmental toxicity.
Mutagenicity:	No data available to indicate product or any components present at greater than 0.1% is mutagenic or genotoxic.
Skin Absorption:	Upon prolonged or repeated exposure, no hazard in normal industrial use.
STOT-single exposure:	Based on available data, the classification criteria are not met.
STOT-repeated exposure:	Based on available data, the classification criteria are not met.
Aspiration hazard:	Based on available data, the classification criteria are not met.

Numerical measures of toxicity, including ATEs Based on available data, the classification criteria are not met.

12 Ecological information

Ecotoxicity (aquatic and terrestrial, if available): Severe ecological hazard. This product may be toxic to plants and/or wildlife.

Ecological Toxicity Data:

Chemical Name	CAS registry number and any unique identifiers	Aquatic EC50 Crustacea	Aquatic ERC50 Algae	Aquatic LC50 Fish
Amines, C12-14-tert-alkyl	68955-53-3	No data available	Aquatic ERC50 (72h) Green Algae 0.44 mg/L	LC50 (96h) Rainbow Trout 1.3 mg/L
Highly refined synthetic base stocks	64742-54-7	EC50 (48h) Daphnia magna > 1000 mg/L	No data available	LC50 (96h) Rainbow Trout > 5000 mg/L
Residual oils (petroleum), solvent dewaxed	64742-62-7	EC50 (48h) Daphnia magna > 1000 mg/L	No data available	LC50 (96h) Rainbow Trout > 5000 mg/L
Petroleum distillates, hydrotreated heavy paraffinic	64742-54-7	EC50 (48h) Daphnia magna > 1000 mg/L	No data available	LC50 (96h) Rainbow Trout > 5000 mg/L

Persistence and degradability: Biodegrades slowly.
Bioaccumulative potential: Bioconcentration may occur.
Mobility in soil: This material is expected to have essentially no mobility in soil. It absorbs strongly to most soil types.
Other adverse effects: None known.

13 Disposal considerations

Information on safe handling for disposal and methods of disposal, including any contaminated packaging: Spent or discarded material is non-hazardous according to environmental regulations.

14 Transport information

Transportation of Dangerous Goods by land (TDG):

UN number: Not regulated for road transport
UN Proper shipping name: Not applicable
Transport hazard class(es): Not applicable
Packing group: Not applicable

International carriage of dangerous goods by sea (IMDG/IMO):

UN number: Not regulated by IMDG
UN Proper shipping name: Not applicable
Transport hazard class(es): Not applicable
Packing group: Not applicable

International carriage of dangerous goods by air (IATA):

UN number: Not regulated by IATA
UN Proper shipping name: Not applicable
Transport hazard class(es): Not applicable
Packing group: Not applicable

Environmental hazards according to the International Maritime Dangerous Goods Code and the United Nations Model Regulations: No

Transport in bulk (according to Annex II of the International Convention for the Prevention of Pollution From Ships, 1973, as modified by the Protocol of 1978 (MARPOL 73/78) and the International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk (IBC Code)): No data available

Special precautions in connection with transport or conveyance either within or outside the premises: No data available

15 Regulatory information

Safety, health and environmental regulations, made within or outside Canada, specific to the product in question:

Canada - Domestic Substances List (DSL):

Chemical Name	CAS No	Canada - Domestic Substances List (DSL)
Petroleum distillates, hydrotreated heavy paraffinic	64742-54-7	Yes
Residual oils (petroleum), solvent dewaxed	64742-62-7	Yes
Highly refined synthetic base stocks	64742-54-7	Yes
Amines, C12-14-tert-alkyl	68955-53-3	Yes

Canada - Non-Domestic Substances List (NDSL):

Chemical Name	CAS No	Canada - Non-Domestic Substances List (NDSL)
Petroleum distillates, hydrotreated heavy paraffinic	64742-54-7	No
Residual oils (petroleum), solvent dewaxed	64742-62-7	No
Highly refined synthetic base stocks	64742-54-7	No
Amines, C12-14-tert-alkyl	68955-53-3	No

Canada - Controlled Drugs and Substances:

Chemical Name	CAS No	Schedule I	Schedule II	Schedule III	Schedule IV	Schedule V	Schedule VII	Schedule VIII
Petroleum distillates, hydrotreated heavy paraffinic	64742-54-7	No	No	No	No	No	No	No
Residual oils (petroleum), solvent dewaxed	64742-62-7	No	No	No	No	No	No	No
Highly refined synthetic base stocks	64742-54-7	No	No	No	No	No	No	No
Amines, C12-14-tert-alkyl	68955-53-3	No	No	No	No	No	No	No

Chemical Name	CAS No	Class A Precursors	Class B Precursors	Exempt Precursors	Class 1 Targeted Substances	Class 2 Targeted Substances
Petroleum distillates, hydrotreated heavy paraffinic	64742-54-7	No	No	No	No	No
Residual oils (petroleum), solvent dewaxed	64742-62-7	No	No	No	No	No
Highly refined synthetic base stocks	64742-54-7	No	No	No	No	No
Amines, C12-14-tert-alkyl	68955-53-3	No	No	No	No	No

Canada - CEPA - Schedule III Export Control List:

Chemical Name	CAS No	Part 1 Prohibited Substances	Part 2 Substances Subject to Notification or Consent	Part 3 Restricted Substances	Export Control List
Petroleum distillates, hydrotreated heavy paraffinic	64742-54-7	No	No	No	No
Residual oils (petroleum), solvent dewaxed	64742-62-7	No	No	No	No
Highly refined synthetic base stocks	64742-54-7	No	No	No	No
Amines, C12-14-tert-alkyl	68955-53-3	No	No	No	No

Canada CEPA - 2015 Greenhouse Gases (GHG) Subject to Mandatory Reporting:

Chemical Name	CAS No	Canada CEPA - 2015 Greenhouse Gases (GHG) Subject to Mandatory Reporting
Petroleum distillates, hydrotreated heavy paraffinic	64742-54-7	No
Residual oils (petroleum), solvent dewaxed	64742-62-7	No
Highly refined synthetic base stocks	64742-54-7	No
Amines, C12-14-tert-alkyl	68955-53-3	No

Canada - Narcotic Control Regulations (C.R.C., c. 1041):

Chemical Name	CAS No	Canada - Narcotic Control Regulations (C.R.C., c. 1041)
Petroleum distillates, hydrotreated heavy paraffinic	64742-54-7	No
Residual oils (petroleum), solvent dewaxed	64742-62-7	No
Highly refined synthetic base stocks	64742-54-7	No
Amines, C12-14-tert-alkyl	68955-53-3	No

Canada - Ontario - Toxics Reduction - List of Priority Toxics:

Chemical Name	CAS No	Canada - Ontario - Toxics Reduction - List of Priority Toxics
Petroleum distillates, hydrotreated	64742-54-7	No

heavy paraffinic		
Residual oils (petroleum), solvent dewaxed	64742-62-7	No
Highly refined synthetic base stocks	64742-54-7	No
Amines, C12-14-tert-alkyl	68955-53-3	No

Stockholm Convention on Persistent Organic Pollutants:

Chemical Name	CAS No	Stockholm Convention on Persistent Organic Pollutants
Petroleum distillates, hydrotreated heavy paraffinic	64742-54-7	No
Residual oils (petroleum), solvent dewaxed	64742-62-7	No
Highly refined synthetic base stocks	64742-54-7	No
Amines, C12-14-tert-alkyl	68955-53-3	No

Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade:

Chemical Name	CAS No	Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade .
Petroleum distillates, hydrotreated heavy paraffinic	64742-54-7	No
Residual oils (petroleum), solvent dewaxed	64742-62-7	No
Highly refined synthetic base stocks	64742-54-7	No
Amines, C12-14-tert-alkyl	68955-53-3	No

(United Nations) - Kyoto Protocol - Convention on Climate Change - Greenhouse Gases (GHGs):

Chemical Name	CAS No	(United Nations) - Kyoto Protocol - Convention on Climate Change - Greenhouse Gases (GHGs)
Petroleum distillates, hydrotreated heavy paraffinic	64742-54-7	No
Residual oils (petroleum), solvent dewaxed	64742-62-7	No
Highly refined synthetic base stocks	64742-54-7	No
Amines, C12-14-tert-alkyl	68955-53-3	No

Montreal Protocol on Substances that Deplete the Ozone Layer:

Chemical Name	CAS No	Montreal Protocol on Substances that Deplete the Ozone Layer
Petroleum distillates, hydrotreated heavy paraffinic	64742-54-7	No
Residual oils (petroleum), solvent dewaxed	64742-62-7	No
Highly refined synthetic base stocks	64742-54-7	No
Amines, C12-14-tert-alkyl	68955-53-3	No

Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal:

Chemical Name	CAS No	Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal
Petroleum distillates, hydrotreated heavy paraffinic	64742-54-7	No
Residual oils (petroleum), solvent dewaxed	64742-62-7	No
Highly refined synthetic base stocks	64742-54-7	No
Amines, C12-14-tert-alkyl	68955-53-3	No

16 Other information**Date of the latest revision of the safety data sheet:**

14-11-2020

Revision Number:

18

Reason for revision:

Activated by Document Formulation Generation

Disclaimer:

This safety data sheet and the information it contains is offered to you in good faith as accurate. We have reviewed any information contained in the data sheet which we have received from outside sources and we believe the information to be correct, but cannot guarantee its accuracy or completeness. Health and safety precautions in this data sheet may not be adequate for all individuals and/or situations. It is the user's obligation to evaluate and use this product in a safe manner and to comply with all applicable laws and regulations. No statement made in this data sheet shall be construed as permission or recommendation for the use of any product in a manner that might infringe existing patents. No warranty is made, either expressed or implied.