



LubeFusion
lubricant solutions at work

**Material
Safety
Datasheet**

CAS No
Date Issued:
31/01/2013
LUBEFUSION
INDUSTRIAL GEAR
OIL EP 320

Company Details

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1. Product and Company Identification

<u>Trade / Commercial Name</u>	LUBEFUSION INDUSTRIAL GEAR OIL EP 320		
<u>Chemical Name</u>	oil, n.o.s., flash point more than 93 oC (200 oF)		
<u>Formula</u>	A mixture of hydrocarbons		
<u>Chemical Family</u>	Hydrocarbon		
<u>Synonyms</u>	N/A		
<u>Un No</u>	1268	<u>Hazchem Code</u>	2z
<u>ERG No</u>	128	<u>EAC</u>	0

2. Hazards Identification

Slippery Hazard
May burn but will not ignite readily.
Fire may produce irritating, gases.+
Runoff from fire control could cause pollution.+

3. Composition

<u>Hazardous Components</u>	Blend of refined mineral oils and additives. Risk phrases R36 and R38 apply.
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4. First Aid Measures

<u>First Aid Skin</u>	Remove & isolate contaminated clothing, including shoes. Flush skin with running water for 20 minutes.
<u>First Aid Eyes</u>	Flush eyes with water for 20 minutes. Hold eyelids open while washing.
<u>First Aid Ingested</u>	Do not induce vomiting. Wash out mouth with water if conscious.

First Aid Inhalation

Seek medical treatment.

Move victim to fresh air.

If not breathing give artificial respiration.

If breathing of victim is difficult administer oxygen for a maximum period of one hour.

5. Fire Fighting Measures

Small Fires: Dry chemical, CO₂, water spray or regular foam.

Large Fires: Water spray, fog or regular foam.

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

Do not scatter spilled material with high pressure water streams.

Fire involving Tanks: Cool containers with flooding quantities of water until well after fire is out.

Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.

ALWAYS stay away from the ends of tanks.

Isolate spill or leak area immediately for at least 10 to 25 metres (30 to 80 feet) in all directions.

Keep unauthorized personnel away. Stay upwind.

Wear positive pressure self-contained breathing apparatus (SCBA).

Structural firefighters' protective clothing will only provide limited protection.

If ROAD OR RAIL TANKER is involved in a fire, ISOLATE for 800 metres (1/2 mile) in all directions;

also, consider initial evacuation for 800 metres (1/2 mile) in all directions.

6. Accidental Release Measures

Breathing apparatus and protective gloves

Contain (avoid spillage from entering drains or water courses)

PRECAUTIONS:

Restrict access to area.

Provide adequate protective equipment and ventilation.

Remove sources of heat and flame.

Notify occupational and environmental authorities.

SPILL OR LEAK:

Do not touch or walk through spilled material.

Stop leak if you can do it without risk.

Small Dry Spills

With clean shovel place material into clean, dry container and cover loosely; move containers from spill area.

Small Spills

Take up with sand or other noncombustible absorbent material and place into containers for later disposal.

Large Spills

Cover powder spill with plastic sheet or tarp to minimize spreading.

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

7. Handling And Storage

When handling product in drums, safety footwear should be worn and proper handling equipment should be used.

Prevent spillages.

Storage: Keep in a cool, dry, well-ventilated place. Use properly labelled and closable containers.

Avoid direct sunlight, heat sources, and strong oxidizing agents.

Storage temperature: 0°C minimum to 50°C maximum.

Recommended materials: For containers or container linings, use: mild steel or high density polyethylene.

Unsuitable materials: For containers or container linings, avoid: PVC.

Other information: Polyethylene containers should not be exposed to high temperatures because of possible risk of distortion.

8. Exposure Controls/Personal Protection

Occupational Exposure Limits Threshold limit values are given below.

Lower exposure limits may apply locally:

Component name	Limit type	Value	Unit	Other information
Oil mist, mineral	8-hour TWA	5	mg/m ³	ACGIH
	15-min STEL	10	mg/m ³	ACGIH

Controls

The control measures appropriate for a particular worksite depend on how this material is used and on the extent of exposure. The best protection is to enclose operations and/or provide local exhaust ventilation at the site of chemical release. Use a non-sparking, grounded ventilation system separate from other exhaust ventilation systems. Exhaust directly to the outside. Supply sufficient replacement air to make up for air removed. Have a safety shower/eye wash fountain readily available in the immediate work area

Personal Protection

If engineering controls and work practices are not effective in controlling this material, then wear suitable personal protection equipment, including chemical safety goggles & face shield, boots, imperious gloves, coveralls, & respiratory protection. Have appropriate equipment available for use in emergencies.

9. Physical & Chemical Properties

PARAMETER	METHOD	UNITS	IGO 68	IGO 100	IGO 150	IGO 220	IGO 320	IGO 460	IGO 680	IGO1000
Density @ 15C	ISO 3675	Kg/m ³	0.885	0.888	0.892	0.893	0.899	0.903	0.920	0.937
Viscosity@ 40C	ISO 3104	Mm ² /s	68.1	107.0	153.4	216.9	319.1	452.2	665.6	1000.0
Viscosity@ 100C	ISO 3104	Mm ² /s	8.7	11.8	14.8	18.5	23.7	29.9	34.5	43.5

Viscosity Index ISO 2909 99 98 96 95 93 95 82 80
Open C flash point ISO 2592 °C 230 233 227 270 264 256 258 244
Pour point ISO 3016 C -24 -21 -27 -21 -15 -12 -12 -9
FZG A/8,3/90 DIN 51 354/2 Fail stage >13 >13 >13 >13 >13 >13 >13 >13
FZG micropitting FVA 54 Fail stage - - - 10+ 10+ 10+ 10+ 10+
GFT class - - - - High High High High high

10. Stability And Reactivity

<u>Conditions to Avoid</u>	Stable. Avoid extremes of temperature and direct sunlight.
<u>Incompatible Materials</u>	Strong oxidizing agents.
<u>Other</u>	Hazardous decomposition products are not expected to form during normal storage.

11. Toxicological Information

Toxicological data has not been determined specifically for this product. Information given is based on a knowledge of the components and the toxicology of similar products.

Acute toxicity - oral: LD50 expected to be above 2000 mg/kg.
Acute toxicity - dermal: LD50 expected to be above 2000 mg/kg.
Acute toxicity - inhalation: Not considered to be an inhalation hazard under normal conditions of use.

Eye irritation: Expected to be slightly irritant.
Skin irritation: Expected to be slightly irritant.
Respiratory irritation: If mists are inhaled, slight irritation of the respiratory tract could occur.
Skin sensitization: Normally not expected to be a skin sensitizer
Carcinogenicity: Information is based on mineral oils of types shown to be non-carcinogenic in animal skin-painting studies.
Mutagenicity: Not considered to be a mutagenic hazard.
Other information: Prolonged and/or repeated contact with this product can result in defatting of the skin, particularly at elevated temperatures.
This can lead to irritation and possibly dermatitis, especially under conditions of poor personal hygiene.
Skin contact should be minimised.
Used engine oils may contain harmful impurities that have accumulated during use.
The concentration of such impurities will depend on use and they may present risks to health and the environment on disposal.
ALL used oil should be handled with caution and skin contact avoided as far as possible.

12. Ecological Information

Ecotoxicological data have not been determined specifically for this product. Information given is based on a knowledge of normal components and the ecotoxicology of similar products.

Mobility: Liquid under most environmental conditions. Floats on water.
If it enters soil, it will adsorb to soil particles and will not be mobile.

Persistence/degradability: Not readily biodegradable. Major constituents are expected to be inherently biodegradable, but the product contains components that may persist in the environment.

Bioaccumulation: Has the potential to bioaccumulate.

Ecotoxicity: Poorly soluble mixture. Product is not chronically toxic at 1 mg/L.

May cause physical fouling of aquatic organisms.

13. Disposal Considerations

<u>Disposal Method Product</u>	There are no uniform EC regulations for the disposal of chemicals or residues. Chemical residues generally count as special waste. The disposal of the latter is regulated in the EC member countries through corresponding laws and regulations. We recommend that you contact the authorities in charge or approved waste disposal companies which will advise you on how to dispose of special waste.
<u>Disposal Method Packaging</u>	Disposal in accordance with local legal provisions.

14. Transport Information

<u>UN No</u>	1268 <u>Hazchem Code</u>	2z
<u>ERG No</u>	128 <u>EAC</u>	0
<u>IMDG-Shipping Name</u>	LUBRICATING OIL, Not Regulated	
<u>Marine Pollutant</u>	Yes	
<u>Class</u>	LOW HAZARD - Slippery Hazard	
<u>Subsidiary Risks</u>	Lubefusion hydraulic oils are not regulated and no special transportation requirements exist.	

15. Regulatory Information

<u>EEC Hazard Classification</u>	LOW HAZARD
<u>Risk Phases</u>	Danger of cumulative effects. Risk phrases R36 and R38 apply.
<u>Safety Phases</u>	This material and its container must be disposed of in a safe way
<u>National Legislation</u>	Not classified as hazardous for transport (DOT, TDG, IMO/IMDG)

16. Other Information

Reason for Alteration: General update.

The information contained herein is based on the present state of our knowledge.

It characterizes the product with regard to the appropriate safety precautions.
It does not represent a guarantee of the properness of the product.

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