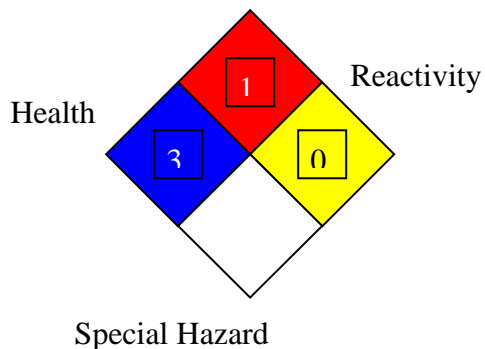




## Jordan Petroleum Refinery Company Material Safety Data Sheet IND.BEARING

NFPA: Flammability



JPRC LUB-17

HMIS III:

Flammability	1
Health	3
Reactivity	0

### SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name:	IND.BEARING OIL (32, 46, 68, 100, 150, 220, 320, 460)
MSDS Number:	JPRC LUB-17
Product Use Description:	For use in the lubrication of plain and rolling- element bearings. May be used for closed gear units, where temperatures and loads are moderate, and where additive-treated oils are not required.
Company	Jordan Petroleum Refinery Amman – Jordan. TEL: + 962 6 4630151 or 4657600 FAX: + 962 6 4657934 or 4657939 P.O.BOX: 3396 Amman 11181 – Jordan P.O.BOX: 1079 Amman 11118 – Jordan Website: <a href="http://www.jopetrol.com.jo">http://www.jopetrol.com.jo</a> E-mail: <a href="mailto:addewan@jopetrol.com.jo">addewan@jopetrol.com.jo</a>

## SECTION 2. COMPOSITION / INFORMATION ON INGREDIENTS.

COMPOSITION :	SN 500
	SN 150
	BS 150
	Viscoplex 1-244

## SECTION 3. HAZARDS IDENTIFICATION

Hazardous identification

US OSHA hazard communication standard for SN( 500,150 ), BS 150:

Product assessed in accordance with OSHA 29 CFR 1910.1200 & determined to be hazardous

Effects of over exposure: no significant effects expected.

Emergency response data: black semi – solid. Dot ERG NO.- NA

## SECTION 4. FIRST AID MEASURES

First Aid Measures:

Eye Contact

Flush thoroughly with water .If irritation occurs , call a physician

Skin contact

Wash contact areas with soap & water.

Inhalation

Not expected to be a problem.

Ingestion

Not expected to be a problem when ingested. If uncomfortable seek medical assistance.

## SECTION 5. FIRE-FIGHTING MEASURES

Fire- Fighting Measure

Extinguishing media:

Carbon dioxide, foam, dry chemical, and water fog.

Special fire fighting procedures:

Water or foam may cause frothing. Use water to keep fire exposed containers cool. Water spray may be used to flush spills away from exposure. Prevent runoff from fire control or dilution from entering streams, sewers, or drinking water supply.

Special protective equipment:

For fires in enclosed areas, fire fighters must use self-contained breathing apparatus (SCBA) and full turnout gear.

Unusual fire and explosion hazards

Storage tank headspace may contain flammable atmosphere.

NFPA hazard ID

Flammable limits- LEL: NA, UEL: NA.

Health : 3, Flammability : 1,

Reactivity : 0

Hazardous decomposition products

Carbon monoxide.

## SECTION 6. ACCIDENTAL RELEASE MEASURES

### Accidental Release Measures

This material is slippery and might cause a traffic accident. If spilled on road, it must be covered with sand immediately. In the event of a spill or leak, accident persons not wearing protective equipment & clothing should be restricted from contaminated areas until clean up has been completed.

The following steps should be undertaken following a spill or leak:

- 1- Notify safety personnel.
- 2- Remove all sources of heat and ignition.
- 3- Ventilate potentially explosive atmospheres.
- 4- Do not touch the spilled material; stop the leak if it is possible to do so without risk.
- 5- Use water spray to reduce vapors; do not get water inside container. Do not flush waste to sewers or open waterways.
- 6- For liquid spills, cover with sand and then remove for later disposal.
- 7- Prevent spills from entering storm sewers or drains.

### Personal precautions

Immediately contact emergency personnel. Keep unnecessary personnel away. Use suitable protective equipment (see section 8). Follow all fire-fighting procedures.

## SECTION 7. HANDLING AND STORAGE

### Handling:

Avoid contact with eyes, skin and clothing. Keep container closed. Use only with adequate ventilation. Avoid breathing vapor or mist. Wash thoroughly after handling.

### Storage

Keep container tightly closed. Keep container in a cool, well-ventilated area. Store away from strong oxidizing agents or combustible material.

## SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### Exposure controls/ personal protection

#### Respiratory protection

No special requirements under ordinary conditions of use and with adequate ventilation.

#### Skin and body

No special equipment required. However, good personal hygiene practices should

always be followed.

Hands

Use chemical resistant apron and / or other clothing to protect against hot liquid & to avoid skin contact

Eyes

Normal industrial eye protection practices should be.

Engineering controls

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limits value.

Occupational exposure limits

Exposure limit of SN 500, SN 150, BS 150 for oil mist:

5.00 mg/m<sup>3</sup>

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Form:	Liquid
Appearance:	Bright and Clear,
VI for 32:	103
VI for 46:	102
VI for 68:	103
VI for 100:	102
VI for 150:	102
VI for 220:	102
VI for 320:	99
VI for 460:	96
Flash point for 32:	210 ° C (COC)
Flash point for 46:	225 ° C (COC)
Flash point for 68:	240 ° C (COC)
Flash point for 100:	260 ° C (COC)
Flash point for 150:	270 ° C (COC)
Flash point for 220:	274 ° C (COC)
Flash point for 320:	284 ° C (COC)
Flash point for 460:	284 ° C (COC)
Pour Point for 32:	-15 ° C
Pour Point for 46:	-9 ° C
Pour Point for 68:	-9 ° C
Pour Point for 100:	-9 ° C
Pour Point for 150:	-9 ° C

Pour Point for 220:	-9 ° C
Pour Point for 320:	-9 ° C
Pour Point for 460:	-9 ° C
Density for 32:	0.8838 g/cm <sup>3</sup> @ 15 ° C Test Method: ASTM D 1298
Density for 46:	0.8831 g/cm <sup>3</sup> @ 15 ° C Test Method: ASTM D 1298
Density for 100:	0.8918 g/cm <sup>3</sup> @ 15 ° C Test Method: ASTM D 1298
Density for 150:	0.8938 g/cm <sup>3</sup> @ 15 ° C Test Method: ASTM D 1298
Density for 220:	0.8990 g/cm <sup>3</sup> @ 15 ° C Test Method: ASTM D 1298
Density for 320:	0.8998 g/cm <sup>3</sup> @ 15 ° C Test Method: ASTM D 1298
Kinematic viscosity for 32:	32 centi-stock @ 40 ° C Test Method ASTM D 445
Kinematic viscosity for 46:	46 centi-stock @ 40 ° C Test Method ASTM D 445
Kinematic viscosity for 100:	100 centi-stock @ 40 ° C Test Method ASTM D 445
Kinematic viscosity for 150:	150 centi-stock @ 40 ° C Test Method ASTM D 445
Kinematic viscosity for 220:	220 centi-stock @ 40 ° C Test Method ASTM D 445
Kinematic viscosity for 320:	320 centi-stock @ 40 ° C Test Method ASTM D 445

## SECTION 10. STABILITY AND REACTIVITY

Stability:	The product is stable.
Material to avoid:	Strong oxidizing and reducing agents.
Condition to avoid:	High temperatures, sparks, and open flames.
Hazardous decomposition products:	Sulphur oxides. Hydrogen sulphide. Carbon monoxide.

## SECTION 11. TOXICOLOGICAL INFORMATION

Routes of Entry	Skin, Eyes, Ingestion, and Inhalation
Acute Effects	
Inhalation	Irritating to respiratory system.
Ingestion	Not determined.
Skin contact	Non-irritating to the skin.
Eye contact	Irritating to eyes.
LD <sub>50</sub>	>2000 mg/kg

## SECTION 12. ECOLOGICAL INFORMATION

Environmental Fate and effects: (SN 500, SN 150, BS 150)	This product is expected to be inherently biodegradable. There is no evidence to suggest bioaccumulation will occur. It is not expected to be toxic to aquatic
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organisms. Accidental spillage may lead to penetration in the soil and groundwater. However, there is no evidence that this would cause adverse ecological effects.

### SECTION 13. DISPOSAL CONSIDERATIONS

#### Waste disposal

Product is suitable for burning in an enclosed, controlled burner for fuel value or disposal by supervised incineration. Such burning may be limited pursuant to the resource conservation and recovery Act. In addition, the product is suitable for processing by an approved recycling facility or can be disposed of at an appropriate government waste disposal facility. Use of these methods is subject to user compliance with applicable laws and regulations and consideration of product characteristics at time of disposal.

#### RCRA Information

The unused product, in our opinion, is not specifically listed by the EPA as a hazardous waste (40CFR, Part 261D), nor is not formulated to contain materials which are listed hazardous wastes. It does not exhibit the hazardous characteristics of ignitability, corrosively, or reactivity and is not formulated with contaminants as determined by the Toxicity Characteristic Leaching Procedure (TCLP). However, used product may be regulated.

### SECTION 14. OTHER INFORMATION

#### LD<sub>50</sub>

Lethal Dose (mg/kg)

#### PEL

Permissible Exposure Limits

#### NFPA

National Fire Protection Association:

#### PPE

Personal Protective Equipment

#### SCBA

Self – Contained Breathing Apparatus

#### TWA

Time – Weighted Average.

#### OSHA

Occupational Safety And Health Administration

#### ACGIH

American Conference of Governmental Industrial Hygienists