

# SAFETY DATA SHEET

In According with 3<sup>rd</sup> revision GHS SDS

## Section 1 – Identification

Product Name : Hydraulic 32, 46, 68, 100, 150  
 Product Use : Hydraulic Oil  
 Manufacturer : IRPC Oil Ltd.  
 54 Moo 2 Suksawad Road Amphur Phrapradaeng Samuthprakarn Thailand  
 Emergency Call : +66(0) 38 802560  
 Website : www.irpc.co.th

## Section 2– Hazards Identification

**EC No 1272/2008** : This product is not classified as dangerous according to Regulation (EC) No 1272/2008. (CLP)  
**Directive 67/548/EEC** : This product is not classified as dangerous according to EU Directive 67/548/EEC.  
**GHS** : Not classified.  
**Label elements** : Not applicable  
**Other hazards** : Not applicable

## Section 3 – Composition / Information on Ingredients

Chemical Name	CAS Number	EC Number	Percent weight
Base Oil Group I	Commercial	-	> 98
Additives	Commercial	-	< 2

\*Contains less than 3% DMSO-extract

## Section 4 – First-aid Measures

**Skin Exposure** : Flood skin with running water, cover with clean cotton or gauze, obtain medical advice immediately.  
**Eyes Exposure** : Flood eyes with fresh running water. In the event of any product remaining, do not try to remove it other than by continued irrigation with water. Obtain medical attention immediately.  
**Inhalation** : If inhalation of mists, fumes or vapor causes irritation to the nose or throat, or coughing, remove to fresh air. If symptoms persist obtain medical advice.

**Ingestion** : If contamination of the mouth occurs, wash out thoroughly with water. Except as a deliberate act, the ingestion of large amounts of product is unlikely. If it should occur, DO NOT induce vomiting; persist obtain medical advice.

## Section 5 – Fire-fighting Measures

**Suitable extinguishing agents:** Dry chemical powder, foam, water fog or carbon dioxide. DO NOT USE water jets.

**Hazards during fire-fighting** : Carbon monoxide, carbon dioxide, phosphorus (PO<sub>x</sub>), sulfur oxides (SO<sub>x</sub>), other pyrolysis products typical of burning organic material..

**Protective equipment** : Insulated breathing apparatus must be worn in confined premises with heavy concentrations of fumes and gases.

## Section 6 – Accidental Release Measures

**Personal precautions** : Avoid inhalation and direct contact.

### Emergency procedures

▪ **Spill or leak:**

- Eliminate all ignition sources (no smoking, flares, sparks or flames in immediate area)
- Do NOT direct water at spill or source of leak.
- Clean up all spills immediately.
- Do not touch or walk through spilled material.
- Stop leak if you can do it without risk.
- If possible, turn leaking containers so that gas escapes rather than liquid.

**Cleanup** : Ventilate area. Collect in closed containers for disposal. Minimize water use for cleaning.

**CAUTION:** When in contact with this substance, many materials become brittle and are likely to break without warning.

## Section 7 – Handling and Storage

**Handling** : Use with adequate ventilation. Use personal protective equipment as required. Handle in accordance with good industrial hygiene and safety procedures. Ground/bond container and receiving equipment. Use only non-sparking tools.

**Storage conditions** : Store under cover away from moisture and sources of ignition. Do not overheat in storage. Under no circumstances should water be allowed to contact hot product because of the danger of boil-over. Particular care should be taken to ensure that bulk storage tanks are watertight and that any steam heating coils are regularly checked for leaks.

## Section 8 – Exposure Controls / Personal Protection

### Exposure limits

Component Name	Reference	TWA	
		ppm	mg/m3
Base Oil Group I	US-OSHA (PELs)	-	5
	Australia exposure standard	-	5

### Personal protective equipment

- Respiratory protection : In case of insufficient ventilation, wear suitable respiratory equipment.
- Eye protection : Wear safety glasses with side shields, goggles or face shield.
- Protective clothing : Wear suitable protective clothing and gloves.
- Ventilation : Provide adequate ventilation when processing material at elevated temperatures.

**Other protective equipment:** N.A

**Engineering Controls** : Provide mechanical ventilation; in general such ventilation should be provided at compounding/ converting areas and at fabricating/ filling work stations where the material is heated. Local exhaust ventilation should be used over and in the vicinity of machinery involved in handling the molten material.

## Section 9–Physical and Chemical Properties

- Physical Description** : Liquid
- Color** : Bright and Clear
- Odor** : Characteristic odor of oil
- pH** : Not available
- Vapor Pressure** : Not available
- Vapor Density** : Not applicable
- Boiling Point** : Not available
- Melting Point** : Not applicable
- Flow Point** : Not available
- Flash Point** : 224, 232, 244, 260, 270 °C (follow up product number)
- Auto-ignition** : No data available
- Solubility in water** : Miscible in common solvents
- Specific Gravity** : Not applicable
- Relative Density** : 0.863, 0.869, 0.874, 0.879, 0.884 g/cm<sup>3</sup> (follow up product number)
- Viscosity** : 32, 46, 68, 100, 150 cSt @ 40 °C (follow up product number)
- Octanol/water partition coefficient** : Not available
- Evaporation Rate** : Not available

## Section 10 – Stability and Reactivity

- Stability** : Stable under normal ambient temperature
- Condition to Avoid** : Heating causes evaporation of flammable vapors.
- Material to Avoid** : May react with strong oxidizing agents, such as chlorates, nitrates, peroxides, etc.
- Dangerous decomposition:** Incomplete combustion will generate smoke, toxic fume, carbon dioxide and hazardous gases, including carbon monoxide.

## Section 11 – Toxicological Information

### Acute Toxicity

Chemical name	Route	Species	Acute Toxic Value
Base Oil Group I	Oral	Rat	LC <sub>50</sub> 620 g/m <sup>3</sup> /4h
	Dermal	Rabbit	LC <sub>50</sub> 75 pph/15 m
	Inhalation	Rat	LC <sub>50</sub> 2.18 mg/m <sup>3</sup> /4h

### Irritating/corrosive effects

- Eye Irritation** : Cause burns if hot material contacts eyes.
- Skin Irritation** : Prolonged or repeated skin contact may eventually result in dermatitis or more serious irreversible skin disorders.
- Inhalation** : Inhalation of vapors or aerosols (mists, fumes), generated by the materials during the course of normal handling, may be damaging to the health of the individual.
- Ingestion** : If accidentally swallowed in small doses, though larger quantities may cause nausea and diarrhea.
- Other information** : NA.

## Section 12 – Ecological Information

### Eco-toxicity

Chemical name	Eco-toxic Value
Base Oil Group I	LC <sub>50</sub> >5000 mg/l/96h: <i>Oncorhynchus mykiss</i> Fresh water fish (OECD Guide-line 203)
	EC <sub>50</sub> >1000 mg/l/48h: <i>Daphnia magna</i> Crustacea (OECD Guide-line 202)

**Persistence and degradability:** Expected to be readily biodegradable but the product contains components that may persist in the environment.

- Bio-accumulate potential** : Product is not likely to accumulate in biological organisms.
- Mobility in soil** : The product will absorb to the soil particles and will not be mobile.
- Other adverse effects** : Films formed on water may affect oxygen transfer and damage organisms.

## Section 13 – Disposal Considerations

### Disposal Methods:

Dispose in accordance with all applicable regulations. Dispose of this material and its container to hazardous or special waste collection point. Incinerate the material under controlled conditions in an approved incinerator. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container.

DO NOT allow wash water from cleaning or process equipment to enter drains. It may be necessary to collect all wash water for treatment before disposal. In all cases disposal to sewer may be subject to local laws and regulations and these should be considered first. Recycle containers if possible, or dispose of in an authorized landfill.

## Section 14 – Transport Information

Regulatory information	UN number	Class	Packing Group	Label	Proper shipping name
DOT	-	-	-	-	-
ADR / RID	-	-	-	-	-
IMDG CODE	-	-	-	-	-
ICAO / IATA	-	-	-	-	-

## Section 15 – Regulatory Information

### European Inventory of Existing Commercial Chemical Substances (EINECS)

The components of this product are on the EINECS inventory or are exempt from inventory requirements.

**Directive 67/548/EEC:** This substance is not classified in the Annex I of Directive 67/548/EEC

### US Toxic Substances Control Act

This product and/or its components are not on the TSCA Inventory.

### NFPA - USA

Health – 2, Flammability – 2, Reactivity – 0

### Canada - WHMIS

This product does not meet WHMIS classification criteria.

## Section 16 – Other Information

DOT	:	Department of Transportation
ADR	:	European agreement concerning the international carriage of dangerous goods by road.
RID	:	Regulations concerning the international carriage of dangerous goods by rail.
IMDG – CODE	:	International maritime dangerous goods code
ICAO	:	International Civil Aviation Organization
IATA	:	International air transport association
GHS	:	Globally Harmonized System of Classification and Labeling of Chemicals
NFPA	:	National Fire Protection Association
WHMIS	:	Workplace Hazardous Materials Information System

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