



## MATERIAL SAFETY DATA SHEET

HYDRAULIC 32, 46, 68

CODE No's 5421-3

**1 IDENTIFICATION OF THE SUBSTANCE & OF THE COMPANY / UNDERTAKING****IDENTIFICATION OF THE SUBSTANCE OR PREPARATION:**

HYDRAULIC 32, 46 and 68 are low zinc ISO Type HM high quality anti-wear hydraulic oils and are recommended for use in most machine tools, industrial and construction plant, hydrostatic and hydrokinetic systems. They meet the requirements in Vickers Sperry Rand data sheets IND-286-S-EN and M-2950-S and with an 11 plus FZG Load stage, DIN 51525 part 2 - HLP.

**COMPANY IDENTIFICATION:**

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Blends of highly refined hydrocarbon mineral oils and contain inhibitor and anti-wear additives.

**3 HAZARDS IDENTIFICATION**

On the basis of our knowledge of the highly refined mineral oils and on the recommendations of the manufacturer of the additives used the Hydran LZ oils are unlikely to be hazardous to man in normal use. In the environment the Hydraulic oils are likely to biodegrade slowly.

#### 4 FIRST AID MEASURES

##### TYPE OF EXPOSURE

###### **Ingestion**

Likely to be harmless if swallowed in small amounts - larger quantities may cause nausea and diarrhoea.

###### **Skin**

Unlikely to cause irritation, but prolonged or frequent contact may cause irritation which could result in dermatitis.

###### **Eyes**

May cause minor irritation with short-term redness and stinging.

###### **Inhalation**

Unlikely in normal use.

##### FIRST AID MEASURES

###### **Ingestion**

Wash mouth out with water. Do not induce vomiting because of the danger of aspiration. If aspiration occurs or is expected get immediate medical advice.

###### **Skin**

Wash skin as soon as possible with soap and water. Change contaminated clothing and launder before reuse.

###### **Eyes**

Wash out thoroughly with water. If redness and/or irritation continues get medical advice.

###### **Inhalation**

If inhalation of fumes irritates the nose or throat or causes coughing remove to fresh air. Get medical advice if irritation continues.

#### 5 FIRE-FIGHTING MEASURES

Extinguish with Dry Powder, Foam or Water Fog. For small fires use CO<sub>2</sub> or BCF - the adverse environmental effects of BCF/Halon are such that their use is no longer considered acceptable.

Do not tackle fires with water except as a fog; water may be used to cool the area surrounding fires.

Fires in closed or confined spaces should be tackled by trained personnel who should wear breathing apparatus.

## 6 ACCIDENTAL RELEASE MEASURES

May cause slippery surfaces.

Contain spillage - do not wash spillage down drain. Absorb using absorbent clay, diatomaceous clay or other suitable absorbent.

## 7 HANDLING AND STORAGE

### 7.1 Handling

It is recommended that protective clothing, as detailed in Section 8, should be worn when handling Hydraulic 32, 46 and 68.

### 7.2 Storage

Drums should be stored on their sides on racks preferably under cover, out of direct sunlight, in well ventilated conditions

Other types of containers should be stored under cover out of direct sunlight, in well ventilated conditions. Care should be taken to avoid over-stacking.

## 8 EXPOSURE CONTROL / PERSONAL PROTECTION

As with all mineral oil based products keep skin contact to a minimum and ensure good hygiene standards.

**Respiratory protection** - Unlikely to be required in normal use. Note Occupational Exposure Limits for Oil Mist (HSE Guidance Note EH 40/90) -

**Long term exposure limit** - (8 hour TWA reference period) 5 milligrams per cubic metre.

**Short term exposure limit** - (15 minute reference period) - 10 milligrams per cubic metre.

**Hand and skin protection** - if continued or repeated exposure is likely PROTECTIVE CLOTHING SHOULD BE WORN including gloves (nitrile rubber or neoprene).

**Eye protection** - eye protection should be worn if splashing is likely.

## 9 PHYSICAL AND CHEMICAL PROPERTIES

<b>Hydraulic</b>	32	46	68
<b>Appearance</b>	Amber coloured mineral oils		
<b>Density at 15°C</b>	0.8746	0.875	0.8836
<b>Flash Point PMC °C</b>	190	200	200
<b>KV/40 °C cSt</b>	31.83	47.62	67.54

#### 10 STABILITY AND REACTIVITY

**Conditions to Avoid** - excess heat can lead to decomposition of the constituent additives with evolution of oxides of carbon and sulphur.

**Materials to Avoid** - may react with strong oxidising materials.

**Hazardous Decomposition Products** - oxides of carbon and sulphur. With incomplete combustion - carbon monoxide.

#### 11 TOXICOLOGICAL INFORMATION

The mineral oils and other components of these oils may be considered not to be essentially toxic in normal handling.

#### 12 ECOLOGICAL INFORMATION

No information available but can be expected to biodegrade slowly.

#### 13 DISPOSAL CONSIDERATIONS

Disposal - by incineration or by methods approved by Local Authority.

#### 14 TRANSPORT INFORMATION

Not applicable; non-hazardous.

#### 15 REGULATORY INFORMATION

As far as is known not classified according to EEC Directives 67/548/EEC and 88/379/EEC.

## **16 OTHER INFORMATION**

**Further Information can be found in Health and Safety Executive publications, a list of which may be made available on request.**

### **LEGAL NOTICE**

The information in this Data Sheet applies only to the products designated herein and produced or supplied by Finol Oils Ltd. It is based on our experience and on the data available to us at the time of its issue and is accurate to the best of our knowledge. The customer is strongly advised to observe and ensure that its employees and customers observe all directions contained herein. However, no warranty is made or implied that the information is accurate or complete and no liability will be accepted whatsoever - (other than liability in respect of the matters referred to in Section 2 Unfair Contract Terms Act 1977) arising out of the use of the information or the products designated herein. Where third party products are used in conjunction with or instead of products produced or supplied by Finol Ltd, the customers should himself obtain all necessary technical, health and safety information about such products from the third party.

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Hydraulic 32, 46 and 68