



# Material Safety Data Sheet

## Hydraulic Oil 46

Date Revised: May 2015

### 1. Identification of the Substance/Preparation and the Company/Undertaking

**Substance or Preparation Trade Name:** Hydraulic Oil 46  
**Unique Reference Number(s):**  
**Company/Undertaking Name & Address** Motor Oils Direct Ltd,  
Layton View  
West road  
Melsonby  
North Yorkshire  
DL10 5NR  
**Telephone Number:** +44 (0)1512 301451  
**Emergency Telephone No.** As above

### 2. Hazards Identification

2.1 Classification of the substance or mixture  
Not classified as hazardous in accordance with CLP (EC 1272/2008) and DPD (1999/45/EC)

2.2 Label Elements  
No labelling required  
(P102) Keep out of reach of children  
(P280) Wear protective gloves/protective clothing/eye protection/face protection

2.3 Other Hazards  
Not considered to be carcinogenic under IARC. All of the oils in this product have been demonstrated to contain less than 3% extractables by the IP 346 DMSO test.

### 3. Composition

#### 3.2 Mixtures

Ingredients	EC No.	REACH Reg No.	GHS Classification	DSD Classification	Conc. %
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No hazardous ingredients present at a concentration at or exceeding the Declaration of Content Limit

### 4. First Aid Measures

**Inhalation:** Remove the affected person to fresh air. If recovery is not rapid, obtain medical attention

**Skin Contact:** Wash the affected parts of the body with soap and water. Change contaminated clothing. Dry clean and launder before re-use. No emergency measures are necessary but if adverse skin effects follow, refer for medical attention.

**Ingestion:** Do not induce vomiting. Wash out mouth with water and seek immediate medical attention. Drinking water may

**Eye Contact:** be beneficial. Treat symptomatically  
Flush eyes immediately with fresh water for at least 15 minutes while holding the eyelids open. No emergency measures are necessary but if adverse eye effects follow, refer for medical attention.

**Pressure Injection:** Obtain immediate medical attention even though the injury may appear minor.

## 5. Fire Fighting Measures

<b>Flash Point:</b>	Typical 220°C (COC)
<b>Extinguishing Media:</b>	Foam, Dry Chemical, Carbon Dioxide, Water Mist
<b>Specific Exposure Hazards:</b>	Combustion can produce carbon monoxide, carbon dioxide, water vapour, unburnt hydrocarbons, partially oxidised organic compounds and unidentified inorganic compounds, some of which may be toxic.
<b>Specific Protective Equipment for Fire Fighters:</b>	Use self-contained breathing equipment when fighting fire in confined spaces. Material floats on water. Water may be used to cool containers exposed to fire.
<b>Explosion Data:</b>	Material does not have explosive properties..

## 6. Accidental Release Measures

<b>Personal Precautions:</b>	Surfaces may become slippery after spillage.
<b>Environmental Precautions:</b>	Water may be used to flush spills away from sources of ignition. Do not allow the product to enter public drainage system or open water courses. Bund using absorbent granules, sand, earth or proprietary equipment. Reclaim liquid directly or soak in an absorbent medium and transfer to a suitable marked container.
<b>Spillage Procedure:</b>	Personal Protective Equipment (PPE) must be worn (see Section 8). Ventilate area and prevent entry into sewers and waterways. Collect free liquid for recycling or disposal. Residual material can be collected using absorbent material.
<b>Absorbent Materials:</b>	Sand, active clay or absorbent sheeting.
<b>Disposal of Spillage:</b>	By incineration or via authorised / licensed waste disposal contractor. Disposal must be in accordance with local regulations and current national legislation.

## 7. Handling and Storage

<b>Handling:</b>	Avoid contact with the eyes – wear chemical protective goggles when handling the product. Protective clothing such as impervious gloves should be worn if skin contact is anticipated. Protective clothing should be regularly inspected and maintained. The use of barrier and after work creams may be beneficial.
<b>Storage:</b>	Store under cover in a cool and dry location. Avoid exposure to high heat and sources of ignition.

## 8. Exposure Controls / Personal Protection

<b>Exposure Limits:</b>	None
<b>Ventilation Procedures:</b>	Use with adequate ventilation.
<b>Eye Protection:</b>	Chemical resistant goggles should be worn when handling, or where any risk of splashing is likely.
<b>Skin Protection:</b>	Where prolonged or repeated contact is unavoidable wear impervious gloves when handling the product.. The use of appropriate barrier and after work creams may be beneficial and gloves should be considered whenever their use is practicable and safe. Change heavily contaminated clothing and overalls as soon as possible.

## 9. Physical and Chemical Properties

<b>Physical State:</b>	Liquid
<b>Colour:</b>	Amber to Light Brown
<b>Relative Density:</b>	0.860 – 0.880 g/ml at 15°C
<b>Boiling Range:</b>	> 280°C estimated
<b>Viscosity:</b>	Typical, 46 cSt at 40°C
<b>Pour Point:</b>	Typical, -30°C
<b>Flash Point:</b>	> 220°C, (ASTM D93, PMCC)

## 10. Stability and Reactivity

<b>Stability:</b>	Material is stable at moderately elevated temperatures and pressures. May react with strong oxidising agents, especially at high temperatures.
<b>Conditions to Avoid:</b>	Avoid extreme temperatures, Preferably store between 5°C to 39°C.
<b>Materials to Avoid:</b>	Strong oxidising agents (e.g. chlorates, peroxides)
<b>Decomposition Products:</b>	Hazardous decomposition products are not formed when stored under normal conditions. Incomplete combustion or thermal decomposition may generate such materials as: particulate matter and unburnt hydrocarbons; oxides of carbon; water; partially oxidized organic compounds.

## 11. Toxicological Information

**This material is characterised as non-toxic because it shows the following characteristics**  
(\*based on data from components and similar products):

<b>Eye Irritation:</b>	Unlikely to cause more than transient stinging or reddening if accidental eye contact occurs.
<b>Skin Irritation:</b>	Not expected to be a primary skin irritant*. Prolonged or repeated skin contact may lead to dermatitis.
<b>Respiratory Irritation:</b>	Prolonged exposure to oil mists / vapours may cause irritation of mucous membranes and the upper respiratory tract.*.
<b>Dermal Toxicity:</b>	LD50 > 2000 mg/kg* (rabbits)
<b>Inhalation Toxicity:</b>	No data to suggest product is hazardous in this area
<b>Oral Toxicity:</b>	LD50 > 5000 mg/kg* (rabbits)
<b>Dermal Sensitization:</b>	No data available to indicate product or components may be a skin sensitizer
<b>Inhalation Sensitization:</b>	No data available to indicate product or components may be respiratory sensitizers
<b>Chronic Toxicity:</b>	No data available to indicate product or components present at greater than 1.0% are chronic health hazards
<b>Carcinogenicity:</b>	No data available to indicate product or components present at greater than 0.1% may present a carcinogenic hazard
<b>Reproductive Toxicity:</b>	No data available to indicate product or components present at greater than 0.1% may cause reproductive toxicity
<b>Teratogenicity:</b>	No data available to indicate product or components present at greater than 0.1% may cause birth defects
<b>Other:</b>	No other health hazards known Contains mineral oil. Under working conditions which may generate mists observe the US OSHA PEL of 5 mg.m <sup>-3</sup> and ACGIH STEL of 10 mg.m <sup>-3</sup>

## 12. Ecological Information

**Environmental Fate:** Because of its low density this material floats on water. Since it consists of relatively low molecular weight paraffinic substances, small spillages into water will be dispersed by evaporation and/or biodegradation.

<b>Aquatic Toxicity (fish):</b>	LC50 >400,000 ppm in 96 h – Rainbow Trout (0% mortality)
<b>Aquatic Toxicity (algae):</b>	not established.
<b>Aquatic Toxicity (invertebrate):</b>	LC50 > 500,000 ppm in 96 h – Mysisidopsis bahia
<b>Mobility:</b>	This material will float on water. For other Physio-chemical properties see Section 9.
<b>Biodegradation:</b>	Inherently Biodegradable (OECD 301B 50% in 28 days)
<b>Bioaccumulation Potential:</b>	Bioaccumulation is unlikely due to the very low water solubility of this product. Bioavailability to aquatic organisms is minimal.
<b>Other Ecological Information:</b>	Although not toxic to vertebrates and invertebrates, spilled material may affect organisms (especially small invertebrates) by physical smothering leading to or by deoxygenation of the water below the oil film.

## 13. Disposal Considerations

<b>Waste Disposal:</b>	All means of disposal should comply with local and national regulations. Dispose of product and containers carefully and responsibly. Do not allow product to contaminate ponds, water courses, soil or drains. Do not dispose in drains.
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## 14. Transport Information

**This material is not classified as dangerous for transport under current EC and International legislation.**

<b>UN No:</b>	Not classified.
<b>RID/ADR:</b>	Not classified.
<b>IMO:</b>	Not classified.
<b>IATA/ICAO:</b>	Not classified.
<b>Marine Pollution Category</b>	Marpol 73/78 Annex I

## 15. Regulatory Information

<b>EC Dangerous Substances / Preparations Classification:</b>	This material is not classified as dangerous for supply under current EC legislation
<b>Risk Phrases:</b>	None
<b>Safety Phrases:</b>	None

## 16. Other Information

### DISCLAIMER:

The information and recommendations contained herein are accurate and reliable to the best knowledge and belief of Motor oils direct Limited as of the date issued, but are offered without guarantee or warranty. They relate to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Conditions of use of the material are under the control of the user. Therefore, it is the user's responsibility to satisfy themselves as to the suitability and completeness of such information for their own particular use.