

HYDRA POWER ZF PLUS 46

PRODUCT CODE
7363

1. IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY / UNDERTAKING

Product identifier : HYDRA POWER ZF PLUS 46
Viscosity Grade : ISO VG 46
Relevant identified uses of the substance or mixture and uses advised against : Industrial hydraulic oil.
 This oil should not be used for any other purpose than the intended use as a hydraulic oil without expert advice.
Details of the supplier of the safety data sheet : ReinhardOil.dk ApS
 Helleruplund alle 8
 2900 Hellerup
 Tel: +45 70 26 70 07
 E-mail: mail@reinhardoil.dk
Emergency telephone number : +45 70 26 70 07

2. HAZARDS IDENTIFICATION

Classification of the substance or mixture : Not classified as dangerous under EC criteria.
Most important adverse physicochemical effects : Combustible liquid.
Most important adverse human health effects : Prolonged or repeated skin contact with the material will remove natural oils and could lead to a dermatitis.
Most important adverse environmental effects : Spills may contaminate water supplies / pollute public waters.
 Spills may form a film on water surfaces causing damage to organisms and oxygen transfer may be obstructed.

Label elements (according to Directive 1999/45/EC):

- **hazard symbols** : Not applicable.
 - **indications of danger** : Not applicable.
 - **risk phrases** : Not applicable.
 - **safety advices** : Do not empty into drains ; dispose of this material and its container in a safe way.
Other hazards : Injection under the skin can occur when using high pressure equipment.
 Overexposure to oil mist may cause respiratory irritations.
 Oil mist deposited on surfaces may cause slip hazard.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical characterization : Mixture of mineral base oils (PCA-content < 3 % - IP 346) and additives.

Composition of the mixture:

Substance name	Contents	CAS No	EC No	Annex No	Ref REACH	Classification
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based	80 - 90 %	72623-87-1	276-738-4	649-483-00-5	-----	
Lubricating oils (petroleum), C20-C50, hydrotreated neutral oil-based, high-viscosity.	5 - 10 %	72623-85-9	276-736-3	649-481-00-4	-----	
Alkyl phenol	0,1 - 1 %	-----	CONFIDENTIAL	-----	-----	Xi; R36/37/38 N; R51-53

Other information : See § 16 for full text of all R- phrases.

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- after inhalation : Assure fresh air breathing. If you feel unwell, seek medical advice.
- after contact with skin : Remove contaminated clothing and shoes. Wash skin thoroughly with mild soap and water. Never use kerosine or gasoline for cleaning the skin.
- after contact with the eyes : Rinse immediately with plenty of water. Seek medical attention if irritation develops.
- after ingestion : Do not induce vomiting. Seek medical attention immediately.
- Most important symptoms and effects, both acute and delayed** : Overexposure to oil mist may cause respiratory irritations.
- Indication of any immediate medical attention and special treatment needed** : If injected under the skin when using high pressure equipment, send casualty immediately to a hospital, even when there are few or no symptoms.

5. FIREFIGHTING MEASURES

- Suitable extinguishing media** : Water fog. Carbon dioxide. Foam. Dry chemical product.
- Unsuitable extinguishing media** : Do not use a heavy water stream.
- Special hazards arising from the substance or mixture** : Under fire conditions, hazardous fumes will be present.
- Advice for firefighters** : Do not enter fire area without proper protective equipment, including respiratory protection. Wear self-contained breathing apparatus, rubber boots and thick rubber gloves. Use water spray or fog for cooling exposed containers. Avoid fire-fighting water to enter environment.

6. ACCIDENTAL RELEASE MEASURESPersonal precautions, protective equipment and emergency procedures:

- for non-emergency personnel : Evacuate unnecessary personnel.
- for emergency responders : Equip cleanup crew with proper protection. Wear suitable protective clothing, gloves and eye or face protection. Eliminate every possible source of ignition.
- Environmental precautions** : Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Avoid release to the environment. Notify authorities if liquid enters sewers or public waters.
- Methods and material for containment and cleaning up** : Clean up any spills as soon as possible, using an absorbent material to collect it. Use suitable disposal containers.
- Reference to other sections** : See also heading 8 & 13

7. HANDLING AND STORAGE

- Precautions for safe handling** : Keep away from sources of ignition. No naked lights. No smoking. Local exhaust and general ventilation must be adequate to meet exposure standards. Proper grounding procedures to avoid static electricity should be followed. Avoid release to the environment. Wash hands and other exposed areas with soap and water before leaving work.
- Conditions for safe storage, including any incompatibilities** : Store this product in a dry location where it can be protected from the elements. Store in tightly closed, properly ventilated containers away from heat, sparks, open flame, strong oxidizers, radiations, and other initiators. Do not store near oxidizing agents or acidic material. Store at temperatures not exceeding 50°C/122°F.
- Specific end use(s)** : See Product Data Sheet for detailed information.

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- Occupational exposure limit values** : The American Conference of Governmental Industrial Hygienists (ACGIH) has assigned mineral oil mist a threshold limit value (TLV) of 5 mg/m³ as a Time Weighted Average (TWA) for a normal 8-hour workday and a 40-hour workweek and a short-term exposure limit (STEL) of 10 mg/m³ for periods not to exceed 15 minutes. Exposures at the STEL concentration should not be repeated more than four times a day and should be separated by intervals of at least 60 minutes. [ACGIH 1994, p. 28]
- Biological limit values** : No data available.

Exposure controls:

- Appropriate engineering controls** : Use adequate ventilation to keep oil mist below applicable standard.
- Individual protection measures, such as personal protective equipment:**
- eye / face protection : Chemical goggles or safety glasses. (EN 166).
 - skin protection : Wear suitable protective clothing. (EN 465, EN 466 or EN 467).
 - hand protection : Wear suitable gloves resistant to chemical penetration. (EN 374)
Use neoprene or rubber gloves.
 - respiratory protection : The use of Filtrertype A (EN 141) is recommended If exceeding the Occupational Exposure Limit.
 - other : Protective helmet. Do not wear leather soled shoes.
- Environmental exposure controls** : Avoid release to the environment.

9. PHYSICAL AND CHEMICAL PROPERTIES**Information on basic physical and chemical properties:**

- Physical state : Oily liquid.
 - Colour : Slightly yellow.
 - Odour : Light odour of petroleum.
 - Pour point : -27°C
 - Flash point : >180°C
 - Density @ 15°C : 875 kg/m³
 - Solubility in water : Insoluble.
 - Viscosity @ 100°C : 8.8 cSt
- Other information:** : See Product Data Sheet for detailed information.

10. STABILITY AND REACTIVITY

- Reactivity** : No data available.
- Chemical stability** : Stable under normal conditions.
- Possibility of hazardous reactions** : None under normal conditions.
- Conditions to avoid** : Extremely high or low temperatures.
- Incompatible materials** : Strong oxidizing agents.
- Hazardous decomposition products** : None under normal conditions.

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- acute toxicity : No specific toxicity data on this product available.
- irritation : Not expected to be irritant.
- corrosivity : No adverse health effects were noted.
- sensitisation : No sensitization effects known.
- repeated dose toxicity : Not applicable.
- carcinogenicity : This product contains mineral oils which are considered to be severely refined and 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 test.
- mutagenicity : Not expected to be mutagenetic.
- toxicity for reproduction : Not expected to be toxic.

Information on likely routes of exposure:

- after ingestion : Ingestion may cause nausea, vomiting and diarrhoea.
- after inhalation : Not expected to present a significant inhalation hazard under anticipated conditions of normal use.
- after skincontact : Repeated or prolonged skin contact may cause irritation.
- after eyecontact : Slight eye irritant upon direct contact.
- Symptoms related to the physical, chemical and toxicological characteristics : None under normal conditions.
- Delayed and immediate effects as well as chronic effects from short and long-term exposure : Prolonged or repeated skin contact with the material will remove natural oils and could lead to a dermatitis.
- Other toxicological information : No data available.

12. ECOLOGICAL INFORMATION

- Toxicity : No specific ecotoxicity data on this product available.
- Persistence and degradability : No data available.
- Bioaccumulative potential : Not determined.
- Mobility in soil : It is to be expected small mobility in soil. Some or a few components may get into the soil and may cause pollution of ground water. Product spreads on the water surface.
- Other adverse effects : May contaminate water supplies.

13. DISPOSAL CONSIDERATIONS

- Waste treatment methods : Dispose of this material and its container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation. Recover waste liquids for recycling/re-use. See Directive 2001/118/EC
- Waste Code European Waste List : 13 01 10 - mineral based non-chlorinated hydraulic oils.
15 01 10 - packaging containing residues of or contaminated by dangerous substances.

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Not regulated.

15. REGULATORY INFORMATION**Safety, health and environmental regulations/legislation specific for the substance or mixture:****EU Regulations:****- European Inventory of Existing Commercial Chemical Substances (EINECS)** : All components listed.**- Germany** : Water Hazard Class: 1 - slightly hazardous to water**International Regulations:****- Australian Inventory of Chemical Substances (AICS)** : All components are in compliance with chemical notification requirements in Australia.**- Canadian Environmental Protection Act (CEPA)** : All components are in compliance with the Canadian Environmental Protection Act and are present on the Domestic Substances List (DSL).**- USA Toxic Substances Control Act (TSCA)** : All components of this material are on the US TSCA Inventory or are exempt.**Chemical safety assessment** : Not applicable.**16. OTHER INFORMATION****Revision Indicators** : None.**Legend to abbreviations and acronyms used in the safety data sheet** : ACGIH = American Conference of Industrial Hygienists
CLP = Classification and Labelling of Substances and Preparations
EC = European Commission. EN = European Norm
IARC= International Agency for Research on Cancer
IP = Institute of Petroleum. ISO = International Organization for Standardization
NLGI = National Lubricating Grease Institute
PCA = Polycyclic Aromatics
TLV = Threshold Limit Value. TWA = Time Weighted Average
VG = Viscosity Grade**Key literature references and sources for data** : Concawe Report 01/53, Concawe Report 01/54, Concawe Report 05/87 and Regulation (EC) No 1907/2006 of the European Parliament and of the Council**List of relevant R phrases, hazard statements, safety phrases and/or precautionary statements** : R36/37/38 : Irritating to eyes, respiratory system and skin.
R51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.**Training advice** : See Product Data Sheet for detailed information.

The contents and format of this MSDS are in accordance with COMMISSION REGULATION (EU) No 453/2010 of 20 May 2010 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).

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