



Hydraulic Oil HVI 46

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Revision date: 19-7-2016 Supersedes: 16-1-2014 version: 4.2

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form : Mixture
 Product name : Hydraulic Oil HVI 46
 Product code : 30000
 Product group : Blend

1.2. Relevant identified uses of the substance or mixture and uses advised against

1.2.1. Relevant identified uses

Main use category : Professional use, Industrial use, Consumer use
 Industrial/Professional use spec : Non-dispersive use
 Used in closed systems
 Function or use category : Hydraulic fluids and additives

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

MPM International Oil Company
 Cyclotronweg 1
 2629 HN Delft - Nederland
 T +31 (0)15 2514030 - F +31 (0)15 2514031
info@mpmoil.nl - www.mpmoil.nl

1.4. Emergency telephone number

Emergency number : +31 (0)15 2514030 (08.00 - 17.00 GMT+1)

Country	Official advisory body	Address	Emergency number	Comment
Ireland	National Poisons Information Centre Beaumont Hospital	Beaumont Hospital Beaumont Road 9 Dublin	: +353 1 8379964	
United Kingdom	Guy's & St Thomas' Poisons Unit Medical Toxicology Unit, Guy's & St Thomas' Hospital Trust	Avonley Road SE14 5ER London	0870 243 2241	

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Not classified

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

EUH-statements : EUH210 - Safety data sheet available on request.
 Extra phrases : This material and its container must be disposed of in a safe way, and as per local legislation.

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

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Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Zinc dialkyl dithiophosphate	(CAS-No.) 68649-42-3 (EC-No.) 272-028-3	0,1 - 0,99	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Aquatic Chronic 2, H411

Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

After inhalation	: Not required.
After skin contact	: Wash with plenty of soap and water.
After eye contact	: In case of contact with eyes, rinse immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart.
After ingestion	: Do NOT induce vomiting. Rinse mouth. Get immediate medical advice/attention.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/effects	: Not expected to present a significant hazard under anticipated conditions of normal use.
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4.3. Indication of any immediate medical attention and special treatment needed

First Aid, decontamination, treatment of symptoms.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	: Carbon dioxide (CO ₂). Powder. Foam.
Unsuitable extinguishing media	: High power water jet.

5.2. Special hazards arising from the substance or mixture

Fire hazard	: On heating/burning: release of (highly) toxic gases/vapours e.g.: carbon monoxide - carbon dioxide.
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5.3. Advice for firefighters

Precautionary measures fire	: Do not enter fire area without proper protective equipment, including respiratory protection.
Other information	: Do not allow water used to extinguish fire to enter drains or waterways. Use water spray/stream to protect personnel and to cool endangered containers.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures	: Keep away from sources of ignition - No smoking.
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6.1.1. For non-emergency personnel

Protective equipment	: Gloves. Safety glasses.
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6.1.2. For emergency responders

Protective equipment	: Wear suitable protective clothing and eye/face protection.
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6.2. Environmental precautions

Prevent spreading over great surfaces (e.g. by damming or installing oil booms). Avoid release to the environment. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up	: Clean up with absorbent material (for example sand, sawdust, neutral absorbent granule, silica gel). Remove from the water surface (e.g. skimming, sucking).
Other information	: Can be slippery on hard, smooth walking area.

6.4. Reference to other sections

No additional information available

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling	: Provide adequate ventilation.
Hygiene measures	: When using do not eat, drink or smoke. Avoid all unnecessary exposure. Wash hands before breaks and at the end of work.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures	: Store in a well-ventilated place. Keep container tightly closed.
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Storage conditions	: Keep the packing dry and well sealed to prevent contamination and absorption of dampness.
Storage temperature	: < 40 °C
Storage area	: Keep container tightly closed in a cool, well-ventilated place.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Hydraulic Oil HVI 46		
EU	IOELV TWA (mg/m ³)	5 mg/m ³

Additional information : Based on ACGIH TLV, a concentration of 5 mg/m³ oilspray (TWA, 8 hour workday) is recommended.

8.2. Exposure controls

Technical measures:

Provide adequate ventilation.

Hand protection:

Wear suitable gloves. DIN EN 374

Eye protection:

Safety glasses

Skin and body protection:

No special clothing/skin protection equipment is recommended under normal conditions of use

Respiratory protection:

Not necessary with sufficient ventilation

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Appearance	: Oily.
Colour	: Yellowbrown.
Odour	: Oily.
Odour threshold	: No data available
pH	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available
Flash point	: 218 °C
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Density	: 876 g/l
Solubility	: Water: insoluble
Log Pow	: No data available
Viscosity, kinematic	: 46 mm ² /s 40C
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available

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9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

None under normal use.

10.2. Chemical stability

The product is stable at normal handling- and storage conditions.

10.3. Possibility of hazardous reactions

No additional information available

10.4. Conditions to avoid

None under normal use.

10.5. Incompatible materials

Acids and bases. Oxidizing substances.

10.6. Hazardous decomposition products

On burning: release of harmful/irritant gases/vapours e.g.: carbon monoxide - carbon dioxide.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

Hydraulic Oil HVI 46	
LD50 oral rat	No data available

Zinc dialkyl dithiophosphate (68649-42-3)	
LD50 oral rat	2230 mg/kg
LD50 dermal rat	> 2000 mg/kg

Skin corrosion/irritation : Not classified

Additional information : Repeated or prolonged skin contact may cause irritation

Serious eye damage/irritation : Not classified

Additional information : slightly irritant but not relevant for classification.

Respiratory or skin sensitisation : Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

Reproductive toxicity : Not classified

STOT-single exposure : Not classified

STOT-repeated exposure : Not classified

Aspiration hazard : Not classified

Hydraulic Oil HVI 46	
Viscosity, kinematic	46 mm ² /s 40C

Other information : No specific data. This product does not present any particular risk when handled in accordance with good occupational hygiene practice.

SECTION 12: Ecological information

12.1. Toxicity

General : Do not allow uncontrolled leakage of product into the environment.

Hydraulic Oil HVI 46	
LC50 fish 1	No data available

Zinc dialkyl dithiophosphate (68649-42-3)	
LC50 fish 1	1 - 5 mg/l @ 96 h
EC50 Daphnia 1	1 - 1,5 mg/l @ 48 h
EC50 other aquatic organisms 1	1 - 5 mg/l @ 96 h Algae
NOEC (acute)	1 mg/l @ 96 h (Fish)

12.2. Persistence and degradability

Hydraulic Oil HVI 46	
Persistence and degradability	Not soluble in water, so only minimally biodegradable.

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Zinc dialkyl dithiophosphate (68649-42-3)	
Persistence and degradability	Not readily biodegradable.

12.3. Bioaccumulative potential

Zinc dialkyl dithiophosphate (68649-42-3)	
Bioaccumulative potential	not determined.

12.4. Mobility in soil

Zinc dialkyl dithiophosphate (68649-42-3)	
Soil	No data available.

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

Additional information : insoluble in water. Some of the components are biologically degradable with difficulty.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product/Packaging disposal recommendations : Hand over to officially registered waste disposal company.
Waste materials : Do not empty into drains; dispose of this material and its container in a safe way. Waste disposal according to official state regulations.

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

ADR	IMDG
14.1. UN number	
Not applicable	Not applicable
14.2. UN proper shipping name	
Not applicable	Not applicable
14.3. Transport hazard class(es)	
Not applicable	Not applicable
Not applicable	Not applicable
14.4. Packing group	
Not applicable	Not applicable
14.5. Environmental hazards	
Dangerous for the environment : No	Dangerous for the environment : No Marine pollutant : No
No supplementary information available	

14.6. Special precautions for user

- Overland transport

No data available

- Transport by sea

No data available

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

15.1.1. EU-Regulations

Contains no REACH substances with Annex XVII restrictions

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No additional information available

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SECTION 16: Other information

Indication of changes:

	Supersedes	Added	
	SDS EU format	Added	
	Revision date	Modified	
	Extra phrases	Added	
1.1	Name	Modified	
2.2	EUH-statements	Added	
2.2	S-phrases	Added	
2.2	Extra phrases	Modified	
3	Composition/information on ingredients	Modified	
9.1	Density	Modified	
9.1	Viscosity, kinematic	Modified	

Abbreviations and acronyms:

	ACGIH: American Conference of Governmental Industrial Hygienists. TWA: Time Weighted Average. TLV: Threshold Limit Value. ASTM: American Society for Testing and Materials . ADR: Accord Européen Relatif au Transport International des Marchandises Dangereuses par Route . RID: Regulations Concerning the International Carriage of Dangerous Goods by Rail . ADNR: Accord Européen relatif au Transport International des Marchandises Dangereuses par voie de Navigation du Rhin. IMDG: International Maritime Dangerous Goods. ICAO: International Civil Aviation Organization . IATA: International Air Transport Association. STEL: Short Term Exposure Limit. LD50: median Lethal Dose for 50% of subjects. ATE: acute toxicity estimate. LC50: median Lethal Concentration for 50% of subjects. EC50: concentration producing 50% effect.
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Full text of H- and EUH-statements:

Aquatic Chronic 2	Hazardous to the aquatic environment — Chronic Hazard, Category 2
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Skin Irrit. 2	Skin corrosion/irritation, Category 2
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H411	Toxic to aquatic life with long lasting effects.
EUH210	Safety data sheet available on request.

SDS MPM REACH

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product