



Biodegradable Hydraulic Oil HVI 46

Safety Data Sheet

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

Date of issue: 30-9-2009 Revision date: 29-1-2015 version: 4.1

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

1.1. Product identifier

Product form : Mixture
 Product name : Biodegradable Hydraulic Oil HVI 46
 Product code : 30000BIO

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
 Use of the substance/mixture : Hydraulic fluids
 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

The preparation is not dangerous in the sense of Directive 1999/45/EC.

2.3. Other hazards

Other hazards not contributing to the classification : Has de-greasing effect on the skin.

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Base oil - not specified		>= 90	Asp. Tox. 1, H304

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3-(diisobutoxy-thiophosphorylsulfanyl)-2-methyl-propionic acid	(CAS-No.) 268567-32-4 (EC-No.) 434-070-2 (REACH-no) 01-2119658068-31	0,1 - 1	Eye Dam. 1, H318 Skin Sens. 1, H317 Aquatic Chronic 3, H412
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Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

After inhalation	: Take victim to fresh air, in a quiet place and if necessary take medical advice.
After skin contact	: After contact with skin, wash immediately with plenty of water and soap. Change contaminated clothing. Wash contaminated clothing before reuse. If irritation persists, consult a specialist.
After eye contact	: In case of contact with eyes, rinse immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart. Subsequently consult an ophthalmologist. Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
After ingestion	: If swallowed, do not induce vomiting: seek medical advice immediately and show this container label.

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

No additional information available

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	: Powder. Foam.
Unsuitable extinguishing media	: High power water jet.

5.2. Special hazards arising from the substance or mixture

Explosion hazard	: Heat from a fire could result in drum bursting.
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5.3. Advice for firefighters

Precautionary measures fire	: Do not enter fire area without proper protective equipment, including respiratory protection.
Protection during firefighting	: In case of fire: Wear self-contained breathing apparatus.
Other information	: Use water spray/stream to protect personnel and to cool endangered containers. Cover liquid spill with foam or sand/earth.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures	: Keep public away. Mark out the contaminated area with signs and prevent access to unauthorized personnel. Keep away from sources of ignition - No smoking.
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6.1.1. For non-emergency personnel

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

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

6.3. Methods and material for containment and cleaning up

For containment	: Stop leak if safe to do so. Prevent spreading over great surfaces (e.g. by damming or installing oil booms).
Methods for cleaning up	: Clean up with absorbent material (for example sand, sawdust, neutral absorbent granule, silica gel).
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	: If suction of the immediate vicinity is impossible or insufficient, adequate airing of the working place must be ensured.
Hygiene measures	: When using do not eat, drink or smoke. Avoid all unnecessary exposure. Wash hands before breaks and at the end of work.

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7.2. Conditions for safe storage, including any incompatibilities

Technical measures	: Keep only in the original container in a cool, well-ventilated place.
Storage temperature	: ≥ 65 °C
Storage area	: Keep container tightly closed in a cool, well-ventilated place. Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
Special rules on packaging	: Keep container tightly closed. Keep/Store only in original container.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

8.2. Exposure controls

Technical measures:

Ensure adequate ventilation of the storage area.

Personal protective equipment:

Gloves.

Hand protection:

Wear suitable gloves. In the cases of special applications, it is recommended to check the chemical resistance with the manufacturer of the gloves.

Eye protection:

Tightly sealed safety glasses.

Skin and body protection:

Wear suitable protective clothing, gloves and eye/face protection.

Respiratory protection:

If technical suction or ventilation measures are not possible or are insufficient, protective breathing apparatus must be worn.



SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: Yellow.
Odour	: characteristic.
Odour threshold	: No data available
pH	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: No data available
Freezing point	: -36 °C ASTM D97
Boiling point	: > °C
Flash point	: 270 °C ASTM D92
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapour pressure	: 10-3 mm Hg
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Density	: 915 g/l ASTM D 1298
Solubility	: Water: Negligible.
Log Pow	: No data available

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Viscosity, kinematic	: 46 mm ² /s @ 40°C
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

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

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

Oxidizing substances.

10.5. Incompatible materials

No additional information available

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

Biodegradable Hydraulic Oil HVI 46	
LD50 oral rat	> 5 g/kg
LD50 dermal rat	> 5 g/kg
LC50 inhalation rat (mg/l)	> 5 mg/l/4h

Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Not classified
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

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

SECTION 12: Ecological information

12.1. Toxicity

General : Do not allow uncontrolled leakage of product into the environment. Some of the components are biologically degradable with difficulty.

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

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12.6. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

European List of Waste (LoW) code : 13 01 12* - readily biodegradable hydraulic oils

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

SECTION 16: Other information

Full text of H- and EUH-statements:

Aquatic Chronic 3	Hazardous to the aquatic environment — Chronic Hazard, Category 3
Asp. Tox. 1	Aspiration hazard, Category 1
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Skin Sens. 1	Skin sensitisation, Category 1
H304	May be fatal if swallowed and enters airways.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H412	Harmful to aquatic life with long lasting effects.
EUH208	Contains 3-(diisobutoxy-thiophosphorylsulfanyl)-2-methyl-propionic acid(268567-32-4). May produce an allergic reaction.

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EUH210	Safety data sheet available on request.
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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