



MPM Hydraulic Oil HVI 15

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878
Issue date: 08/07/2019 Revision date: 02/02/2023 Supersedes: 20/06/2022 version: 5.1

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

1.1. Product identifier

| | |
|-----------------|----------------------------|
| Product form | : Mixture |
| Trade name | : MPM Hydraulic Oil HVI 15 |
| Product code | : 33000 |
| Type of product | : Hydraulic Fluids |
| Product group | : Mixture |

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

Relevant identified uses

| | |
|----------------------------------|--|
| Main use category | : Professional use, Consumer use, Industrial use |
| Industrial/Professional use spec | : Non-dispersive use Used in closed systems |
| Use of the substance/mixture | : Hydraulic fluids and additives |
| Function or use category | : Hydraulic fluids and additives |

1.3. Details of the supplier of the safety data sheet

Manufacturer

MPM International Oil Company BV
Cyclotronweg 1
NL 2629 HN Delft, Zuid Holland
Nederland
T +31 (0)15 2514030 (08.00 - 17.00 GMT+1)
info@mpmoil.com, www.mpmoil.com

1.4. Emergency telephone number

No additional information available

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.

2.3. Other hazards

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII

This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

Contains no PBT and/or vPvB substances $\geq 0.1\%$ assessed in accordance with REACH Annex XIII

Component

| | |
|--|---|
| Substance(s) not meeting the PBT criteria of REACH regulation, in accordance with Annex XIII | Hydrocarbons, C15-C20, n-alkanes, isoalkanes, cyclics, < 0.03% aromatics (64742-46-7), Zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate) (4259-15-8), 2,6-di-tert-butylphenol (128-39-2) |
|--|---|

MPM Hydraulic Oil HVI 15

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

| Component | |
|---|---|
| Substance(s) not meeting the vPvB criteria of REACH regulation, in accordance with Annex XIII | Hydrocarbons, C15-C20, n-alkanes, isoalkanes, cyclics, < 0.03% aromatics (64742-46-7), Zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate) (4259-15-8), 2,6-di-tert-butylphenol (128-39-2) |

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or substance(s) are not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

| Component | |
|---|---|
| Substance(s) not included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 | Hydrocarbons, C15-C20, n-alkanes, isoalkanes, cyclics, < 0.03% aromatics (64742-46-7), Zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate) (4259-15-8), 2,6-di-tert-butylphenol (128-39-2) |

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Comments : Highly refined mineral oil, contains <3% (w/w) DMSO extract, according to IP346

| Name | Product identifier | % | Classification according to Regulation (EC) No. 1272/2008 [CLP] |
|--|--|----------------|---|
| Hydrocarbons, C15-C20, n-alkanes, isoalkanes, cyclics, < 0.03% aromatics | CAS-No.: 64742-46-7 EC-No.: 934-956-3 REACH-no: 01-2119827000-58 | ≥ 1 – ≤ 9.9 | Asp. Tox. 1, H304 |
| Zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate) | CAS-No.: 4259-15-8 EC-No.: 224-235-5 REACH-no: 01-2119493635-27 | ≥ 0.1 – ≤ 0.4 | Eye Dam. 1, H318 Aquatic Chronic 2, H411 |
| 2,6-di-tert-butylphenol | CAS-No.: 128-39-2 EC-No.: 204-884-0 REACH-no: 01-2119490822-33 | ≥ 0.1 – ≤ 0.21 | Skin Irrit. 2, H315 Aquatic Acute 1, H400 Aquatic Chronic 1, H410 |

Specific concentration limits:

| Name | Product identifier | Specific concentration limits (%) |
|--|---|--|
| Zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate) | CAS-No.: 4259-15-8 EC-No.: 224-235-5 REACH-no: 01-2119493635-27 | (50 ≤ C < 100) Eye Dam. 1; H318 (50 ≤ C < 100) Eye Irrit. 2; H319 |
| 2,6-di-tert-butylphenol | CAS-No.: 128-39-2 EC-No.: 204-884-0 REACH-no: 01-2119490822-33 | (35 ≤ C < 100) Skin Irrit. 2; H315 |

Full text of H- and EUH-statements: see section 16

MPM Hydraulic Oil HVI 15

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

SECTION 4: First aid measures

4.1. Description of first aid measures

| | |
|--------------------|---|
| After inhalation | : Not required. |
| After skin contact | : Wash skin with mild soap and water. |
| After eye contact | : In case of eye contact, immediately rinse with clean water for 10-15 minutes. |
| After ingestion | : Do NOT induce vomiting. Rinse mouth out with water. Get immediate medical advice/attention. |

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

| | |
|--------------------|--|
| After inhalation | : Not expected to present a significant inhalation hazard under anticipated conditions of normal use. |
| After skin contact | : Not expected to present a significant skin hazard under anticipated conditions of normal use. |
| After eye contact | : Not expected to present a significant eye contact hazard under anticipated conditions of normal use. |
| After ingestion | : Not expected to present a significant ingestion hazard under anticipated conditions of normal use. |

4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

| | |
|--------------------------------|--------------------------------------|
| Suitable extinguishing media | : Water spray, powder, foam and CO2. |
| Unsuitable extinguishing media | : Do not use a heavy water stream. |

5.2. Special hazards arising from the substance or mixture

No additional information available

5.3. Advice for firefighters

| | |
|--------------------------------|---|
| Precautionary measures fire | : Exercise caution when fighting any chemical fire. |
| Firefighting instructions | : Use water spray or fog for cooling exposed containers. |
| Protection during firefighting | : Do not enter fire area without proper protective equipment, including respiratory protection. |

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

| | |
|------------------|---|
| General measures | : If spilled, may cause the floor to be slippery. |
|------------------|---|

For non-emergency personnel

| | |
|----------------------|---------------------------|
| Protective equipment | : Gloves. Safety glasses. |
| Emergency procedures | : Do not breathe vapours. |

For emergency responders

| | |
|----------------------|---|
| Protective equipment | : Wear suitable protective clothing and gloves. Safety glasses. |
|----------------------|---|

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if product enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

| | |
|-------------------------|--|
| For containment | : Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. |
| Methods for cleaning up | : Detergent. Clean up any spills as soon as possible, using an absorbent material to collect it. |
| Other information | : Spill area may be slippery. Use suitable disposal containers. |

MPM Hydraulic Oil HVI 15

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

6.4. Reference to other sections

No additional information available

SECTION 7: Handling and storage

7.1. Precautions for safe handling

| | |
|-----------------------------------|---|
| Additional hazards when processed | : Avoid all unnecessary exposure. Both local exhaust and general room ventilation are usually required. |
| Precautions for safe handling | : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. |
| Handling temperature | : < 40 °C |
| Hygiene measures | : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. |

7.2. Conditions for safe storage, including any incompatibilities

| | |
|---------------------|--|
| Technical measures | : Store in a closed container. |
| Storage conditions | : Keep container closed when not in use. |
| Storage temperature | : ≤ 40 °C |
| Storage area | : Store in dry, well-ventilated area. |

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

DNEL and PNEC

| | |
|------------------------|---|
| Additional information | : Based on ACGIH TLV, a concentration of 5 mg/m ³ oilspray (TWA, 8 hour workday) is recommended. |
|------------------------|---|

8.2. Exposure controls

Appropriate engineering controls

Technical measures:

No additional information available.

Personal protection equipment

Personal protective equipment:

Gloves. Safety glasses.

Personal protective equipment symbol(s):



Eye and face protection

Eye protection:

Safety goggles

Skin protection

Skin and body protection:

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

Hand protection:

Protective gloves

MPM Hydraulic Oil HVI 15

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

| Hand protection | | | | | |
|-----------------|----------------------|-------------------|----------------|-------------|------------|
| Type | Material | Permeation | Thickness (mm) | Penetration | Standard |
| Gloves | Nitrile rubber (NBR) | 6 (> 480 minutes) | > 0,4 | | EN ISO 374 |

Respiratory protection

Respiratory protection:

No special respiratory protection equipment is recommended under normal conditions of use with adequate ventilation

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

| | |
|---------------------------------|---|
| Physical state | : Liquid. |
| Colour | : Amber. |
| Appearance | : Oily liquid. |
| Odour | : Characteristic. |
| Odour threshold | : Not available |
| Melting point | : Not available |
| Freezing point | : Not available |
| Boiling point | : Not available |
| Flammability (solid, gas) | : Not available |
| Lower explosion limit | : Not available |
| Upper explosion limit | : Not available |
| Flash point | : > 125 °C @ ASTM D92 |
| Auto-ignition temperature | : Not available |
| Decomposition temperature | : Not available |
| pH | : Not available |
| Viscosity, kinematic | : 15 mm ² /s @ 40°C |
| Solubility | : Slightly soluble, the product remains on the water surface. |
| Log Kow | : Not available |
| Vapour pressure | : Not available |
| Vapour pressure at 50°C | : Not available |
| Density | : 841 kg/m ³ @ 15°C |
| Relative density | : Not available |
| Relative vapour density at 20°C | : Not available |
| Particle characteristics | : Not applicable |

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

None under normal conditions.

10.2. Chemical stability

Stable under normal conditions of use.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

No naked flames, sparks, and do not smoke.

10.5. Incompatible materials

Strong oxidizing agent. Acids and bases.

MPM Hydraulic Oil HVI 15

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

10.6. Hazardous decomposition products

None under normal conditions.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

Hydrocarbons, C15-C20, n-alkanes, isoalkanes, cyclics, < 0.03% aromatics (64742-46-7)

| | |
|-----------------------|-------------------|
| LD50 oral rat | > 5000 mg/kg |
| LD50 dermal rat | > 3160 mg/kg |
| LC50 Inhalation - Rat | > 5266 mg/m3 @ 4h |

Zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate) (4259-15-8)

| | |
|--------------------|-----------------------|
| LD50 oral rat | 3100 mg/kg |
| LD50 dermal rabbit | > 5000 mg/kg |
| ATE CLP (oral) | 3100 mg/kg bodyweight |

2,6-di-tert-butylphenol (128-39-2)

| | |
|--------------------|-------------------------|
| LD50 oral rat | > 5000 mg/kg bodyweight |
| LD50 dermal rabbit | > 10000 mg/kg |

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

2,6-di-tert-butylphenol (128-39-2)

| | |
|----------------------------|----------------------|
| NOAEL (oral, rat, 90 days) | 100 mg/kg bodyweight |
|----------------------------|----------------------|

Aspiration hazard : Not classified

MPM Hydraulic Oil HVI 15

| | |
|----------------------|-----------------|
| Viscosity, kinematic | 15 mm²/s @ 40°C |
|----------------------|-----------------|

11.2. Information on other hazards

Endocrine disrupting properties

Adverse health effects caused by endocrine disrupting properties : The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or substance(s) are not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

SECTION 12: Ecological information

12.1. Toxicity

Hazardous to the aquatic environment, short-term (acute) : Not classified

MPM Hydraulic Oil HVI 15

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Hazardous to the aquatic environment, long-term (chronic) : Not classified

| Hydrocarbons, C15-C20, n-alkanes, isoalkanes, cyclics, < 0.03% aromatics (64742-46-7) | |
|---|------------------------|
| EC50 Daphnia 1 | > 3193 mg/l 48h |
| EC50 other aquatic organisms 1 | > 10000 ml/l Algae 72h |

| Zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate) (4259-15-8) | |
|--|--|
| LC50 fish 1 | 10 – 35 mg/l 96h Pimephales promelas (semi static) |
| LC50 fish 2 | 1 – 5 mg/l 96h Pimephales promelas (static) |
| EC50 Daphnia 1 | 1 – 1.5 mg/l 48h Daphnia magna |
| EC50 other aquatic organisms 1 | 1 – 5 mg/l 96h Pseudokirchneriella subcapitata |
| EC50 96h - Algae [1] | 240 mg/l Scenedesmus Subspicatus OECD 201 @21d |
| NOEC (chronic) | 0.4 mg/l Daphnia Magna OECD211 @21d |
| NOEC (acute) | NOEC Acute 220 mg/l Scenedesmus Subspicatus OECD 201-biomass |

| 2,6-di-tert-butylphenol (128-39-2) | |
|------------------------------------|-------------------------------|
| LC50 fish 1 | 1 mg/l |
| EC50 Daphnia 1 | 0.45 mg/l 48h |
| EC50 72h - Algae [1] | 1.2 mg/l |
| LOEC (chronic) | 0.086 mg/l Daphnia magna @21d |
| NOEC (chronic) | 0.035 mg/l Daphnia magna @21d |
| NOEC chronic fish | 0.3 mg/l 28d |
| NOEC chronic crustacea | 0.035 mg/l 21d |

12.2. Persistence and degradability

| MPM Hydraulic Oil HVI 15 | |
|-------------------------------|--|
| Persistence and degradability | Not soluble in water, so only minimally biodegradable. |

| Hydrocarbons, C15-C20, n-alkanes, isoalkanes, cyclics, < 0.03% aromatics (64742-46-7) | |
|---|---------------------|
| Persistence and degradability | Rapidly degradable |
| Biodegradation | 74 % OECD 306; 28 D |

| Zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate) (4259-15-8) | |
|--|--------------------|
| Persistence and degradability | Rapidly degradable |

| 2,6-di-tert-butylphenol (128-39-2) | |
|------------------------------------|--------------------|
| Persistence and degradability | Rapidly degradable |
| Biodegradation | ≥ 12 – ≤ 24 % @28d |

12.3. Bioaccumulative potential

| 2,6-di-tert-butylphenol (128-39-2) | |
|------------------------------------|-----|
| Log Pow | 4.5 |

12.4. Mobility in soil

| MPM Hydraulic Oil HVI 15 | |
|--------------------------|-----------------------------------|
| Soil | Prevent soil and water pollution. |

MPM Hydraulic Oil HVI 15

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

12.5. Results of PBT and vPvB assessment

MPM Hydraulic Oil HVI 15

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII

This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

Component

| | |
|---|---|
| Substance(s) not meeting the PBT criteria of REACH regulation, in accordance with Annex XIII | Hydrocarbons, C15-C20, n-alkanes, isoalkanes, cyclics, < 0.03% aromatics (64742-46-7), Zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate) (4259-15-8), 2,6-di-tert-butylphenol (128-39-2) |
| Substance(s) not meeting the vPvB criteria of REACH regulation, in accordance with Annex XIII | Hydrocarbons, C15-C20, n-alkanes, isoalkanes, cyclics, < 0.03% aromatics (64742-46-7), Zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate) (4259-15-8), 2,6-di-tert-butylphenol (128-39-2) |

12.6. Endocrine disrupting properties

Adverse effects on the environment caused by endocrine disrupting properties : The product does not contain any substances with endocrine disrupting properties.

12.7. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Additional information : This material and its container must be disposed of in a safe way, and as per local legislation.
European List of Waste (LoW, EC 2000/532) : 13 01 10* - mineral based non-chlorinated hydraulic oils

SECTION 14: Transport information

In accordance with ADR / IMDG

| ADR | IMDG |
|---|---------------|
| 14.1. UN number or ID number | |
| Not regulated for transport | |
| 14.2. UN proper shipping name | |
| Not regulated | Not regulated |
| 14.3. Transport hazard class(es) | |
| Not regulated | Not regulated |
| 14.4. Packing group | |
| Not regulated | Not regulated |
| 14.5. Environmental hazards | |
| Not regulated | Not regulated |
| No supplementary information available | |

14.6. Special precautions for user

Overland transport

Not regulated

MPM Hydraulic Oil HVI 15

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Transport by sea

Not regulated

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

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

EU-Regulations

REACH Annex XVII (Restriction List)

Contains no substance(s) listed on REACH Annex XVII (Restriction Conditions)

REACH Annex XIV (Authorisation List)

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

REACH Candidate List (SVHC)

Contains no substance(s) listed on the REACH Candidate List

PIC Regulation (Prior Informed Consent)

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

POP Regulation (Persistent Organic Pollutants)

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

Ozone Regulation (1005/2009)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 1005/2009 on substances that deplete the ozone layer)

Council Regulation (EC) for the control of dual-use items

Contains no substance subject to the COUNCIL REGULATION (EC) for the control of dual-use items

Explosives Precursors Regulation (EU 2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

Drug Precursors Regulation (EC 273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

15.2. Chemical safety assessment

No chemical safety assessment has been carried out for the substance or the mixture by the supplier

SECTION 16: Other information

| Indication of changes | | |
|-----------------------|--|-----------------|
| Section | Changed item | Comments |
| | Supersedes | Modified |
| | Revision date | Modified |
| | Adverse health effects caused by endocrine disrupting properties | Added |
| | Adverse effects on the environment caused by endocrine disrupting properties | Added |
| 1.1 | Trade name | Added |
| 12.4 | Soil | Added |
| 13.1 | European List of Waste (LoW, EC 2000/532) | Added |

MPM Hydraulic Oil HVI 15

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

| Full text of H- and EUH-statements: | |
|-------------------------------------|---|
| Aquatic Acute 1 | Hazardous to the aquatic environment – Acute Hazard, Category 1 |
| Aquatic Chronic 1 | Hazardous to the aquatic environment – Chronic Hazard, Category 1 |
| Aquatic Chronic 2 | Hazardous to the aquatic environment – Chronic Hazard, Category 2 |
| Asp. Tox. 1 | Aspiration hazard, Category 1 |
| EUH210 | Safety data sheet available on request. |
| Eye Dam. 1 | Serious eye damage/eye irritation, Category 1 |
| Eye Irrit. 2 | Serious eye damage/eye irritation, Category 2 |
| H304 | May be fatal if swallowed and enters airways. |
| H315 | Causes skin irritation. |
| H318 | Causes serious eye damage. |
| H319 | Causes serious eye irritation. |
| H400 | Very toxic to aquatic life. |
| H410 | Very toxic to aquatic life with long lasting effects. |
| H411 | Toxic to aquatic life with long lasting effects. |
| Skin Irrit. 2 | Skin corrosion/irritation, Category 2 |

The classification complies with : ATP 12

Safety Data Sheet (SDS), EU

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.