

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878 Issue date: 8-4-2011 Revision date: 3-7-2024 Supersedes: 26-10-2020 version: 4.0

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

1.1. Product identifier

Product form	: Mixture
Trade name	: MPM 4-Stroke Motorcycle Oil 20W-50 Synthetic
Product code	: 52000
Type of product	: Other engine, gear and lubricating oils.
Product group	: Mixture

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

1.2.1. Relevant identified uses

Main use category Use of the substance/mixture Function or use category : Professional use

: Automotive care products

: Lubricants and additives

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Manufacturer

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

1.4. Emergency telephone number

Emergency number

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

Country	Organisation/Company	Address	Emergency number	Comment
Ireland	National Poisons Information Centre Beaumont Hospital	PO Box 1297 Beaumont Road 9 Dublin	+353 1 809 2566 (Healthcare professionals- 24/7) +353 1 809 2166 (public, 8am - 10pm, 7/7)	
Ireland	National Poisons Information Centre Beaumont Hospital	PO Box 1297 Beaumont Road 9	+353 1 809 2566 (Healthcare professionals- 24/7) +353 1 809 2166 (public, 8am - 10pm, 7/7)	
United Kingdom	Guy's & St Thomas' Poisons Unit Medical Toxicology Unit, Guy's & St Thomas' Hospital Trust	Avonley Road SE14 5ER	+44 20 7188 7188	

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

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2.2. Label elements	
Labelling according to Regulation (EC) No. 1	272/2008 [CLP]
Precautionary statements (CLP) EUH-statements	 P102 - Keep out of reach of children. 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

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 3: Composition/information on ingredients

3.1. Substances

Not applicable

- 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]
Phosphorodithioic acid, mixed 0,0-bis(1,3- dimethylbutyl and iso-Pr)esters, zinc salts	CAS-No.: 84605-29-8 EC-No.: 283-392-8 REACH-no: 01-2119493626- 26	≥ 1 – ≤ 2,49	Skin Irrit. 2, H315 Eye Dam. 1, H318 Aquatic Chronic 2, H411

Specific concentration limits		
Name	Product identifier	Specific concentration limits
Phosphorodithioic acid, mixed 0,0-bis(1,3- dimethylbutyl and iso-Pr)esters, zinc salts	CAS-No.: 84605-29-8 EC-No.: 283-392-8 REACH-no: 01-2119493626- 26	(6,25 ≤ C < 100) Skin Irrit. 2, H315 (10 ≤ C < 12,5) Eye Irrit. 2, H319 (12,5 ≤ C < 100) Eye Dam. 1, H318

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

SECTION 4: First aid measures	
4.1. Description of first aid measures	
After inhalation After skin contact After eye contact After ingestion	 Not required. Wash skin with mild soap and water. In case of eye contact, immediately rinse with clean water for 10-15 minutes. 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 After skin contact	 Not expected to present a significant inhalation hazard under anticipated conditions of normal use. Not expected to present a significant skin hazard under anticipated conditions of normal use.

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After eye contact	Not expected to present a significant eye contact hazard under anticipated conditions of
After ingestion :	normal use. 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 measured	es
5.1. Extinguishing media	
Suitable extinguishing media Unsuitable extinguishing media	Water spray, powder, foam and CO2.Do not use a heavy water stream.
5.2. Special hazards arising from th	e substance or mixture

No additional information available

5.3. Advice for firefighters	
Precautionary measures fire Firefighting instructions Protection during firefighting	 Exercise caution when fighting any chemical fire. Use water spray or fog for cooling exposed containers. 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.	
6.1.1. For non-emergency personnel		
Protective equipment	: Gloves. Safety glasses.	
Emergency procedures	: Do not breathe vapours.	
6.1.2. 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 Other information	 Detergent. Clean up any spills as soon as possible, using an absorbent material to collect it Spill area may be slippery. Use suitable disposal containers. 	
6.4. Reference to other sections		

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

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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 an	ny incompatibilities
	Store in a closed container. 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

8.1.1. National occupational exposure and biological limit values

No additional information available

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

Additional information

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

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Technical measures: No additional information available.

8.2.2. Personal protection equipment

Personal protective equipment:

Gloves. Safety glasses.

Personal protective equipment symbol(s):



8.2.2.1. Eye and face protection

Eye protection: Safety goggles

8.2.2.2. Skin protection

Skin and body protection:

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

Hand protection:

Protective gloves

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

8.2.2.3. Respiratory protection

Respiratory protection:

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

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

SECTION 9: Physical and chemical properties

No additional information available

Physical state	: Liquid.
Colour	: Amber.
Appearance	: Oily liquid.
)dour	: Characteristic.
Dour threshold	: Not available
Aelting point	: Not available
Freezing point	Not available
Boiling point	: Not available
lammability	Not available
Explosive limits	: Not available
ower explosion limit	: Not available
Jpper explosion limit	: Not available
lash point	: > 200 °C @ ASTM D92
Auto-ignition temperature	: Not available
Decomposition temperature	: Not available
Н	: Not available
/iscosity, kinematic	: 117 mm²/s @ 40°C
Solubility	: Slightly soluble, the product remains on the water surface.
og Kow	: Not available
/apour pressure	: Not available
/apour pressure at 50°C	: Not available
Density	: 852 kg/m³ @ 15°C
Relative density	: Not available
Relative vapour density at 20°C	: Not available
Particle size	: Not applicable
Particle size distribution	: Not applicable
Particle shape	: Not applicable
Particle aspect ratio	: Not applicable
Particle aggregation state	: Not applicable
Particle agglomeration state	: Not applicable
Particle specific surface area	: Not applicable
Particle dustiness	: Not applicable

9.2. Other information

9.2.1. Information with regard to physical hazard classes

No additional information available

9.2.2. Other safety characteristics

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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.
10.6. Hazardous decomposition products

None under normal conditions.

SECTION 11: Toxicological information

11.1. Information on hazard classes as o	lefined in Regulation (EC) No 1272/2008
Acute toxicity (oral) Acute toxicity (dermal) Acute toxicity (inhalation)	 Not classified (Based on available data, the classification criteria are not met.) Not classified (Based on available data, the classification criteria are not met.) Not classified (Based on available data, the classification criteria are not met.)
Phosphorodithioic acid, mixed 0,0-bis(1	,3-dimethylbutyl and iso-Pr)esters, zinc salts (84605-29-8)
LD50 oral rat	3150 mg/kg OECD 401
LD50 dermal rat	> 2002 mg/kg OECD 402
LC50 Inhalation - Rat	> 2,3 mg/l/4h OECD 403
ATE CLP (oral)	3150 mg/kg bodyweight
Skin corrosion/irritation	: Not classified (Based on available data, the classification criteria are not met.)
Serious eye damage/irritation	: Not classified (Based on available data, the classification criteria are not met.)
Respiratory or skin sensitisation	: Not classified (Based on available data, the classification criteria are not met.)
Germ cell mutagenicity	: Not classified (Based on available data, the classification criteria are not met.)
Carcinogenicity	: Not classified (Based on available data, the classification criteria are not met.)
Reproductive toxicity	: Not classified (Based on available data, the classification criteria are not met.)
STOT-single exposure	: Not classified (Based on available data, the classification criteria are not met.)
STOT-repeated exposure	: Not classified (Based on available data, the classification criteria are not met.)
Aspiration hazard	: Not classified (Based on available data, the classification criteria are not met.)
MPM 4-Stroke Motorcycle Oil 20W-50 Sy	Inthetic
Viscosity, kinematic	117 mm²/s @ 40°C

11.2. Information on other hazards

11.2.1. 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 %

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11.2.2. Other information

SECTION 12: Ecological information		
12.1. Toxicity		
Hazardous to the aquatic environment, short-term : Not classified (Based on available data, the classification criteria are not met.) (acute) Hazardous to the aquatic environment, long-term : Not classified (Based on available data, the classification criteria are not met.) (chronic)		
Phosphorodithioic acid, mixed 0,0-bis(1,3-din	nethylbutyl and iso-Pr)esters, zinc salts (84605-29-8)	
LC50 fish 1	> 4,5 mg/l OECD 203 (Oncorhunchus mykiss)	
EC50 Daphnia 1	23 mg/l OECD 202 (Daphnia magna)	
EC50 72h - Algae [1]	21 mg/I OECD 201 (Desmodesmus subspicatus)	
NOEC (acute)	1,8 mg/l @4d - Oncorhynchus mykiss	
NOEC chronic crustacea	0,4 mg/l @21d OECD 211 (Daphna magna)	
12.2. Persistence and degradability		
MPM 4-Stroke Motorcycle Oil 20W-50 Synthetic		
Persistence and degradability	Not soluble in water, so only minimally biodegradable.	
Phosphorodithioic acid, mixed 0,0-bis(1,3-din	nethylbutyl and iso-Pr)esters, zinc salts (84605-29-8)	
Biodegradation	1,5 % @28d OECD TG 301 B	
12.3. Bioaccumulative potential		
Phosphorodithioic acid, mixed 0,0-bis(1,3-din	nethylbutyl and iso-Pr)esters, zinc salts (84605-29-8)	
Log Kow	0,56 Measurements	
12.4. Mobility in soil		
MPM 4-Stroke Motorcycle Oil 20W-50 Synthet	ic	
Soil	Prevent soil and water pollution.	
12.5. Results of PBT and vPvB assessment		
MPM 4-Stroke Motorcycle Oil 20W-50 Synthetic		
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		
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		

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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 02 06* - synthetic engine, gear and lubricating oils

SECTION 14: Transport information	
In accordance with ADR / IMDG	
14.1. UN number or ID number	
UN-No. UN-No. (IMDG)	: Not regulated : Not regulated
14.2. UN proper shipping name	
Proper Shipping Name (ADR) Proper Shipping Name (IMDG)	: Not regulated : Not regulated
14.3. Transport hazard class(es)	
ADR Transport hazard class(es) (ADR)	: Not regulated
IMDG Transport hazard class(es) (IMDG)	: Not regulated
14.4. Packing group	
Packing group (ADR) Packing group (IMDG)	: Not regulated : Not regulated
14.5. Environmental hazards	
Dangerous for the environment Marine pollutant Other information	: No : No : No supplementary information available
14.6. Special precautions for user	

Overland transport

Not regulated

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

15.1.1. EU-Regulations

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

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

 $\label{eq:contains} \mbox{ contains no substance} (s) \mbox{ listed on REACH Annex XIV (Authorisation List)}$

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals) Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

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15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No additional information available

SECTION 16: Other information

Abbreviations and acronyms ADN European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways ADR European Agreement concerning the International Carriage of Dangerous Goods by Road ATE Acute Toxicity Estimate BCF Bioconcentration factor BLV Biological limit value BCD Biochemical oxygen demand (BOD) CLP Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008 COD Chemical oxygen demand (COD) DMEL Derived-Mo Effect Level ECS0 Median effective concentration EC European Community number VPV8 Very Persistent and Very Bioaccumulative SDS Safety Data Sheet TRGS Technical Rules for Hazardous Substances TLM Median Tolerance Limit ThOD Theoretical oxygen demand (ThOD) STF Sawage treatment plant PNEC Predicad Na-Effect Concentration REACH Regulations concerning the International Carriage of Dangerous Goods by Rail PNEC Predicade Na-Effect Concentration REACH <			
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SDSSafety Data SheetTRGSTechnical Rules for Hazardous SubstancesTLMMedian Tolerance LimitThODTheoretical oxygen demand (ThOD)STPSewage treatment plantPNECPredicted No-Effect ConcentrationREACHRegistration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006RIDRegulations concerning the International Carriage of Dangerous Goods by RailPBTPersistent Bioaccumulative ToxicOELOccupational Exposure LimitOECDOrganisation for Economic Co-operation and DevelopmentNOECNo-Observed Adverse Effect LevelLOAELLowest Observed Adverse Effect LevelLD50Median lethal doseNOAELNo-Observed Adverse Effect LevelLC50Median lethal concentration	EC-No.	European Community number	
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TLMMedian Tolerance LimitThODTheoretical oxygen demand (ThOD)STPSewage treatment plantPNECPredicted No-Effect ConcentrationREACHRegistration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006RIDRegulations concerning the International Carriage of Dangerous Goods by RailPBTPersistent Bioaccumulative ToxicOELOccupational Exposure LimitOECDOrganisation for Economic Co-operation and DevelopmentNOECNo-Observed Effect ConcentrationLOAELLowest Observed Adverse Effect LevelLD50Median lethal doseNOAELNo-Observed Adverse Effect LevelLC50Median lethal concentration	SDS	Safety Data Sheet	
ThODTheoretical oxygen demand (ThOD)STPSewage treatment plantPNECPredicted No-Effect ConcentrationREACHRegistration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006RIDRegulations concerning the International Carriage of Dangerous Goods by RailPBTPersistent Bioaccumulative ToxicOELOccupational Exposure LimitOECDOrganisation for Economic Co-operation and DevelopmentNOECNo-Observed Effect ConcentrationLOAELLowest Observed Adverse Effect LevelLD50Median lethal doseN.O.S.Not Otherwise SpecifiedNOAELNo-Observed Adverse Effect LevelLC50Median lethal concentration	TRGS	Technical Rules for Hazardous Substances	
STPSewage treatment plantPNECPredicted No-Effect ConcentrationREACHRegistration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006RIDRegulations concerning the International Carriage of Dangerous Goods by RailPBTPersistent Bioaccumulative ToxicOELOccupational Exposure LimitOECDOrganisation for Economic Co-operation and DevelopmentNOECNo-Observed Effect ConcentrationNOAECNo-Observed Adverse Effect ConcentrationLOAELLowest Observed Adverse Effect LevelLD50Median lethal doseNOAELNo-Observed Adverse Effect LevelLC50Median lethal concentration	TLM	Median Tolerance Limit	
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PBTPersistent Bioaccumulative ToxicOELOccupational Exposure LimitOECDOrganisation for Economic Co-operation and DevelopmentNOECNo-Observed Effect ConcentrationNOAECNo-Observed Adverse Effect ConcentrationLOAELLowest Observed Adverse Effect LevelLD50Median lethal doseN.O.S.Not Otherwise SpecifiedNOAELNo-Observed Adverse Effect LevelLC50Median lethal concentration	REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006	
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LD50 Median lethal dose N.O.S. Not Otherwise Specified NOAEL No-Observed Adverse Effect Level LC50 Median lethal concentration	NOAEC	No-Observed Adverse Effect Concentration	
N.O.S. Not Otherwise Specified NOAEL No-Observed Adverse Effect Level LC50 Median lethal concentration	LOAEL	Lowest Observed Adverse Effect Level	
NOAEL No-Observed Adverse Effect Level LC50 Median lethal concentration	LD50	Median lethal dose	
LC50 Median lethal concentration	N.O.S.	Not Otherwise Specified	
	NOAEL	No-Observed Adverse Effect Level	
	LC50	Median lethal concentration	
IOELV Indicative Occupational Exposure Limit Value	IOELV	Indicative Occupational Exposure Limit Value	

Safety Data Sheet

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

Abbreviations and acronyms	
ΙΑΤΑ	International Air Transport Association
IARC	International Agency for Research on Cancer
IMDG	International Maritime Dangerous Goods
EN	European Standard

Data sources Training advice : Supplier's safety documents. ECHA (European Chemicals Agency).

: Normal use of this product shall imply use in accordance with the instructions on the packaging.

Other information

The information in this SDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use or disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This MSDS was prepared and is to be used only for this product. If the product is used as a component in another product, this MSDS information may not be applicable.

Full text of H- and EUH-statements	
Aquatic Chronic 2	Hazardous to the aquatic environment – Chronic Hazard, Category 2
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
H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H411	Toxic to aquatic life with long lasting effects.
Skin Irrit. 2	Skin corrosion/irritation, Category 2

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.