

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878 Issue date: 27-3-2023 Revision date: 21-6-2023 version: 1.0

#### SECTION 1: Identification of the substance/mixture and of the company/undertaking 1.1. Product identifier Product form : Mixture Trade name MPM Motor Oil 5W-40 Premium Synthetic Heavy Duty Diesel 05000AE Product code Type of product Other engine, gear and lubricating oils. Product group Blend • 1.2. Relevant identified uses of the substance or mixture and uses advised against 1.2.1. Relevant identified uses : Professional use, Consumer use, Industrial use Main use category Industrial/Professional use spec : Non-dispersive use Used in closed systems Function or use category : 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

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

### 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	PO Box 1297 Beaumont Road 9 Dublin	+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. 1272/2	2008 [CLP]
EUH-statements	<ul> <li>EUH208 - Contains: C14-16-18 Alkylphenol, Molybdeenpolysulfide-alkyl dithiocarbamaat longchain complex. May produce an allergic reaction.</li> <li>EUH210 - Safety data sheet available on request.</li> </ul>
2.3. Other hazards	

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

Other information

: Contains no PBT/vPvB substances ≥ 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 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 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]
reaction mass of isomers of: C7-9-alkyl 3-(3,5-di-tert- butyl-4-hydroxyphenyl)propionate	CAS-No.: 125643-61-0 EC-No.: 406-040-9 EC Index-No.: 607-530-00-7 REACH-no: 01-0000015551- 76	≥ 1 – ≤ 1,99	Aquatic Chronic 4, H413
Bis(nonylphenyl)amine	CAS-No.: 36878-20-3 EC-No.: 253-249-4 REACH-no: 01-2119488911- 28	≥ 1 – ≤ 1,99	Aquatic Chronic 4, H413
Zinc bis[O-(-6-methylheptyl)] bis[O-(sec- butyl)]bis(dithiophosphate)	CAS-No.: 93819-94-4 EC-No.: 298-577-9 REACH-no: 01-2119543726- 33	≥ 0,5 – ≤ 1,49	Skin Irrit. 2, H315 Eye Dam. 1, H318 Aquatic Chronic 2, H411
C14-16-18 Alkylphenol	CAS-No.: 1190625-94-5 EC-No.: 931-468-2 REACH-no: 01-2119498288- 19	≥ 0,1 – ≤ 0,49	Skin Sens. 1, H317 STOT RE 2, H373
Molybdeenpolysulfide-alkyl dithiocarbamaat longchain complex	EC-No.: 457-320-2 REACH-no: 01-0000019337- 66	≥ 0,1 – ≤ 0,49	Skin Irrit. 2, H315 Skin Sens. 1, H317 Aquatic Chronic 3, H412

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Specific concentration limits	fic concentration limits			
Name	Product identifier	Specific concentration limits		
Zinc bis[O-(-6-methylheptyl)] bis[O-(sec- butyl)]bis(dithiophosphate)	CAS-No.: 93819-94-4 EC-No.: 298-577-9 REACH-no: 01-2119543726- 33	( 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	<ul> <li>Not required.</li> <li>Wash skin with mild soap and water.</li> <li>In case of eye contact, immediately rinse with clean water for 10-15 minutes.</li> <li>Do NOT induce vomiting. Rinse mouth out with water. Get immediate medical advice/attention.</li> </ul>			
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

SECTION 5: Firefighting measures				
5.1. Extinguishing media				
Suitable extinguishing media Unsuitable extinguishing media	<ul><li>: Water spray, powder, foam and CO2.</li><li>: Do not use a heavy water stream.</li></ul>			
5.2. Special hazards arising from the substance or mixture				
No additional information available.				

5.3. Advice for firefighters	
Precautionary measures fire Firefighting instructions Protection during firefighting	<ul> <li>Exercise caution when fighting any chemical fire.</li> <li>Use water spray or fog for cooling exposed containers.</li> <li>Do not enter fire area without proper protective equipment, including respiratory protection.</li> </ul>

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 Emergency procedures	<ul><li>Gloves. Safety glasses.</li><li>Do not breathe vapours.</li></ul>		
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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	: 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.					
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	<ul> <li>Avoid all unnecessary exposure. Both local exhaust and general room ventilation are usually required.</li> </ul>				
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, includ	ing 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)					

SECTION 8: Exposure controls/personal protection						
8.1. Control parameters	8.1. Control parameters					
8.1.1. National occupational exposure and biological limit values						
Molybdeenpolysulfide-alkyl dithiocarbamaat longchain complex						
EU - Indicative Occupational Exposure Limit (IOEL)						
IOELV TWA (mg/m³)	10 mg/m <sup>3</sup>					
8.1.2. Recommended monitoring procedures No additional information available						
8.1.3. Air contaminants formed No additional information available.	8.1.3. Air contaminants formed					
8.1.4. DNEL and PNEC						
	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.						

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### 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

land 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

No additional information available.

## 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	:	Not available
Explosive limits	:	Not available
Lower explosion limit	:	Not available
Upper explosion limit	:	Not available
Flash point	:	> 200 °C @ ASTM D92
Auto-ignition temperature	:	Not available
Decomposition temperature	:	Not available

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pH Viscosity, kinematic Solubility Log Kow Vapour pressure Vapour pressure at 50°C Density Relative density Relative density Relative vapour density at 20°C Particle size Particle size Particle size Particle shape Particle appregation state Particle agglomeration state Particle specific surface area	<ul> <li>Not available</li> <li>84 mm²/s @ 40°C</li> <li>Slightly soluble, the product remains on the water surface.</li> <li>Not available</li> <li>Not available</li> <li>854 kg/m³ @ 15°C</li> <li>Not available</li> <li>Not available</li> <li>Not available</li> <li>Not available</li> <li>Not applicable</li> </ul>
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

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.

**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 classifiedAcute toxicity (dermal): Not classifiedAcute toxicity (inhalation): Not classified		
reaction mass of isomers of: C7-9-alkyl 3-(3,5-di-tert-butyl-4-hydroxyphenyl)propionate (125643-61-0)		
LD50 oral rat	> 2000 mg/kg (OECD 401 method)	
LD50 dermal rat	> 2000 mg/kg (OECD 402 method)	

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Bis(nonylphenyl)amine (36878-20-3)		
LD50 oral rat	> 5000 mg/kg OECD 401	
LD50 oral	> 2000 mg/kg OECD 402	
Zinc bis[O-(-6-methylheptyl)] bis[O-(sec-b	utyl)]bis(dithiophosphate) (93819-94-4)	
LD50 oral rat	2600 mg/kg 67/548/EEG annex V	
LD50 dermal rabbit	> 3160 mg/kg bodyweight OECD 402	
LC50 Inhalation - Rat	> 2 mg/l 1h OECD 403 -read across	
ATE CLP (oral)	2600 mg/kg bodyweight	
Molybdeenpolysulfide-alkyl dithiocarbam	aat longchain complex	
LD50 oral rat	> 2000 mg/kg OECD 425	
LD50 dermal rat	> 2000 mg/kg OECD 402	
Skin corrosion/irritation Serious eye damage/irritation Respiratory or skin sensitisation Germ cell mutagenicity Carcinogenicity Reproductive toxicity STOT-single exposure STOT-repeated exposure <b>reaction mass of isomers of: C7-9-alkyl 3</b> - NOAEL (oral, rat, 90 days)	<ul> <li>Not classified</li> <li>St classified</li> <li>St classified</li> <li>St classified</li> </ul>	
C14-16-18 Alkylphenol (1190625-94-5)		
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.	
Aspiration hazard : Not classified  MPM Motor Oil 5W-40 Premium Synthetic Heavy Duty Diesel		
Viscosity, kinematic	84 mm <sup>2</sup> /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 is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission	

#### 11.2.2. Other information

SECTION 12: Ecological information		
12.1. Toxicity		
(acute)	Not classified Not classified	
reaction mass of isomers of: C7-9-alkyl 3-(3,5-di-tert-butyl-4-hydroxyphenyl)propionate (125643-61-0)		
LC50 fish 1	74 mg/l @96h	
LC50 fish 2	100 mg/l @ 14d	

concentration equal to or greater than 0,1 %

Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a

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4,3 mg/l @ 24 h 100 mg/l @ 48 h 3 mg/l ≤ 0,01 mg/l Daphnia magna @21d 0,5 mg/l @ 36 d		
3 mg/l ≤ 0,01 mg/l Daphnia magna @21d		
≤ 0,01 mg/l Daphnia magna @21d		
0,5 mg/l @ 36 d		
3 mg/l @ 72 h		
Bis(nonylphenyl)amine (36878-20-3)		
> 100 mg/l OECD 203 (Danio rerio @96h)		
> 100 mg/l OECD 202 (Daphnia magna)		
> 100 mg/l OECD 201 (Desmodesdus subspicatus)		
Zinc bis[O-(-6-methylheptyl)] bis[O-(sec-butyl)]bis(dithiophosphate) (93819-94-4)		
4,5 mg/l OECD 203 (oncorhynchys mykiss, 96h)		
5,4 mg/l OECD 202, (Daphnia magna, 72h)		
2,1 mg/l Selenastrum capricornutum UTEX 1648		
Molybdeenpolysulfide-alkyl dithiocarbamaat longchain complex		
50 mg/l OECD 202 (Daphnia magna, 48h)		
14 mg/l OECD 201 (Pseudokirchneriella subcapitata)		
94,8 mg/l		
100 mg/l @21d - Daphnia Magna (OECD 211)		
4,05 mg/l		
2 1 2 1		

## 12.2. Persistence and degradability

MPM Motor Oil 5W-40 Premium Synthetic Heavy Duty Diesel		
Persistence and degradability	Not soluble in water, so only minimally biodegradable.	
reaction mass of isomers of: C7-9-alkyl 3-(3,5-di-tert-butyl-4-hydroxyphenyl)propionate (125643-61-0)		
Persistence and degradability	Not readily biodegradable.	
Biodegradation	1 % @28 d	
Bis(nonylphenyl)amine (36878-20-3)		
Persistence and degradability	Not readily biodegradable.	
Biodegradation	1 % @28d	
Zinc bis[O-(-6-methylheptyl)] bis[O-(sec-butyl)]bis(dithiophosphate) (93819-94-4)		
Biodegradation	1,5 % OECD 301B 28d	
Molybdeenpolysulfide-alkyl dithiocarbamaat longchain complex		
Persistence and degradability	Not readily biodegradable.	
Biodegradation	23 % OECD 301 (29d)	

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12.3. Bioaccumulative potential		
reaction mass of isomers of: C7-9-alkyl 3-(3,5-di-tert-butyl-4-hydroxyphenyl)propionate (125643-61-0)		
BCF fish 1	260 mg/kg OECD 305 (Oncorhynchus mykiss, 35d)	
Bioconcentration factor (BCF REACH)	258 (OECD 305 method)	
Log Pow	9,2	
Bioaccumulative potential	Moderately bioaccumulative.	
Bis(nonylphenyl)amine (36878-20-3)		
Log Pow	> 7,6	
Bioaccumulative potential	Bioaccumulation possible.	
Zinc bis[O-(-6-methylheptyl)] bis[O-(sec-butyl)]bis(dithiophosphate) (93819-94-4)		
Log Pow	0,9 @ 23C	
Molybdeenpolysulfide-alkyl dithiocarbamaat longchain complex		
BCF fish 1	88 OECD 305 (Cyprinus carpio, 25C)	
Bioconcentration factor (BCF REACH)	88 OECD 305 (Cyprinus carpio, 25C - 0.05mg/l))	
12.4. Mobility in soil		
MPM Motor Oil 5W-40 Premium Synthetic Heavy Duty Diesel		
Soil	Prevent soil and water pollution.	
reaction mass of isomers of: C7-9-alkyl 3-(3,5-di-tert-butyl-4-hydroxyphenyl)propionate (125643-61-0)		

Log Koc	> 2000	
Bis(nonylphenyl)amine (36878-20-3)		
Soil	Adsorbs into the soil.	
Zinc bis[O-(-6-methylheptyl)] bis[O-(sec-butyl)]bis(dithiophosphate) (93819-94-4)		
Soil	Adsorbs into the soil.	
Molybdeenpolysulfide-alkyl dithiocarbamaat longchain complex		
Soil	Adsorbs into the soil.	
12.5. Results of PBT and vPvB assessment		

No additional information available.

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

12.7. Other adverse effects

SECTION 13: Disposal considerations	
13.1. Waste treatment methods	
<b>o o ( )</b>	<ul> <li>Comply with local regulations for disposal.</li> <li>This material and its container must be disposed of in a safe way, and as per local legislation.</li> </ul>

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European List of Waste (LoW) code

: 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	
Over the set the set of the set	

#### **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

Contains no substance(s) 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)

#### 15.1.2. National regulations

No additional information available.

**15.2. Chemical safety assessment** 

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SECTION 16: Oth	er information
Full text of H- and EUH-statements	
Aquatic Chronic 2	Hazardous to the aquatic environment – Chronic Hazard, Category 2
Aquatic Chronic 3	Hazardous to the aquatic environment – Chronic Hazard, Category 3
Aquatic Chronic 4	Hazardous to the aquatic environment – Chronic Hazard, Category 4
EUH208	Contains: C14-16-18 Alkylphenol, Molybdeenpolysulfide-alkyl dithiocarbamaat longchain complex. May produce an allergic reaction.
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.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H373	May cause damage to organs through prolonged or repeated exposure.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
H413	May cause long lasting harmful effects to aquatic life.
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1	Skin sensitisation, Category 1
STOT RE 2	Specific target organ toxicity – Repeated exposure, 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.