

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878 Issue date: 16/10/2017 Revision date: 12/07/2023 Supersedes: 12/05/2022 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 Motor Oil 5W-30 Premium Synthetic DX1

Product code : 05000DX1

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

Relevant identified uses

Main use category : Professional use, Consumer use, Industrial use

Industrial/Professional use spec : Non-dispersive use

Used in closed systems

Function or use category : Lubricants 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]

Precautionary statements (CLP) : P102 - Keep out of reach of children.

EUH-statements : EUH210 - Safety data sheet available on request.

EUH208 - Contains: Benzenesulphonic acid, methyl mono-C 20 -C 24 branched alkyl

derivatives, calcium salts. May produce an allergic reaction.

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 ≥ 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

Zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate) (4259-15-8), Benzenesulphonic acid, methyl mono-C 20 -C 24 branched alkyl derivatives, calcium salts (722503-68-6), Phenol, dodecyl-, branched (121158-58-5)(1)

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Component

Substance(s) not meeting the vPvB criteria of REACH regulation, in accordance with Annex XIII

Zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate) (4259-15-8), Benzenesulphonic acid, methyl mono-C 20 -C 24 branched alkyl derivatives, calcium salts (722503-68-6), Phenol, dodecyl-, branched (121158-58-5)(1)

(1) Substance(s) in concentration below 0.1 % and displayed on a voluntary basis

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

Zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate) (4259-15-8), Benzenesulphonic acid, methyl mono-C 20 -C 24 branched alkyl derivatives, calcium salts (722503-68-6)

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]
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 – ≤ 0.99	Eye Dam. 1, H318 Aquatic Chronic 2, H411
Phosphorodithioic acid, mixed O,O-bis(sec-Bu and 1,3-dimethylbutyl) esters, zinc salts	CAS-No.: 68784-31-6 EC-No.: 272-238-5 REACH-no: 01-2119657973- 23	≥ 0.1 – ≤ 0.99	Eye Dam. 1, H318 Aquatic Chronic 2, H411
Benzenesulphonic acid, methyl mono-C 20 -C 24 branched alkyl derivatives, calcium salts	CAS-No.: 722503-68-6 EC-No.: 682-816-2	≥ 0.1 – ≤ 0.99	Skin Sens. 1B, H317
Phenol, dodecyl-, branched substance listed on REACH Candidate List (Phenol, alkylation products (mainly in para position) with C12-rich branched alkyl chains from oligomerisation, covering any individual isomers and/ or combinations thereof (PDDP))	CAS-No.: 121158-58-5 EC-No.: 310-154-3 REACH-no: 01-2119513207- 49	≥ 0.01 – ≤ 0.03	Skin Corr. 1C, H314 Repr. 1A, H360F Aquatic Acute 1, H400 (M=10) Aquatic Chronic 1, H410 (M=10)

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	
Benzenesulphonic acid, methyl mono-C 20 -C 24 branched alkyl derivatives, calcium salts	CAS-No.: 722503-68-6 EC-No.: 682-816-2	(2 ≤ C < 100) Skin Sens. 1B; H317	

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

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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.

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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/m3 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

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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

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. : Amber. Colour 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 : > 150 °C @ ASTM D92

Auto-ignition temperature : Not available
Decomposition temperature : Not available
pH : Not available
Viscosity, kinematic : 45 mm²/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 : 852 kg/m³ @ 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.

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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

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
Skin corresion/irritation · Not classified	

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

Z	Zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophos	phate) (4259-15-8)
NOAEL (oral, rat, 90 days) 125 mg/		125 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 407 (Repeated Dose 28-
		Day Oral Toxicity in Rodents)

Aspiration hazard : Not classified

Viscosity, kinematic 45 mm²/s @ 40°C

Phosphorodithioic acid, mixed O,O-bis(sec-Bu and 1,3-dimethylbutyl) esters, zinc salts (68784-31-6)

Viscosity, kinematic ≈ 6.95 mm²/s @ 100.0°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 %

Component	
Phenol, dodecyl-, branched (121158-58-5)	The substance is identified for having endocrine disrupting properties but there is no additional data available (see section 2.3)

SECTION 12: Ecological information

12.1. Toxicity

General

: This product contains one or more components that have a branched alkyl phenol impurity very toxic to aquatic organisms (listed in Chapter 3). The components that contain the impurity have been tested and are not toxic to it aquatic organisms. Therefore, the data in Chapter 3 on the alkylphenol impurity cannot be used to classify the product whatever concerns the toxicity to aquatic organisms.

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

(acute)

Hazardous to the aquatic environment, long-term : Not classified.

(chronic)

Zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate) (4259-15-8)		
LC50 fish 1	4.4 mg/l Oncorhynchus mykiss OECD 203	
LC50 fish 2	≥ 0 mg/l	
EC50 Daphnia 1	75 mg/l Daphnia Magna OECD 201	
EC50 96h - Algae [1]	240 mg/l Scenedesmus Subspicatus OECD 201 @21d	
NOEC (chronic)	0.4 mg/l Daphna Magna OECD 211 @21 D- results analog product	
NOEC (acute)	NOEC Acute 220 mg/l Scededesmus Subspicatus OECD 201-biomass	

12.2. Persistence and degradability

MPM Motor Oil 5W-30 Premium Synthetic DX1		
Persistence and degradability	Not soluble in water, so only minimally biodegradable.	
Zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate) (4259-15-8)		
Persistence and degradability	Rapidly degradable	
Phosphorodithioic acid, mixed O,O-bis(sec-Bu and 1,3-dimethylbutyl) esters, zinc salts (68784-31-6)		
Persistence and degradability	Rapidly degradable	
Benzenesulphonic acid, methyl mono-C 20 -C 24 branched alkyl derivatives, calcium salts (722503-68-6)		
Persistence and degradability	Rapidly degradable	
Phenol, dodecyl-, branched (121158-58-5)		
Persistence and degradability	Rapidly degradable	

12.3. Bioaccumulative potential

Biodegradation

Zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate) (4259-15-8)	
Log Kow	3.59
Phenol, dodecyl-, branched (121158-58-5)	
Bioconcentration factor (BCF REACH)	2.9 @27d
Log Kow	7.1 @0,1d

25 % Sturm-test @28d

12.4. Mobility in soil

MPM Motor Oil 5W-30 Premium Synthetic DX1	
Soil	Prevent soil and water pollution.

12.5. Results of PBT and vPvB assessment

MPM Motor Oil 5W-30 Premium Synthetic DX1

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

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Component	
Substance(s) not meeting the PBT criteria of REACH regulation, in accordance with Annex XIII	Zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate) (4259-15-8), Benzenesulphonic acid, methyl mono-C 20 -C 24 branched alkyl derivatives, calcium salts (722503-68-6), Phenol, dodecyl-, branched (121158-58-5)(¹)
Substance(s) not meeting the vPvB criteria of REACH regulation, in accordance with Annex XIII	Zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate) (4259-15-8), Benzenesulphonic acid, methyl mono-C 20 -C 24 branched alkyl derivatives, calcium salts (722503-68-6), Phenol, dodecyl-, branched (121158-58-5)(¹)

⁽¹⁾ Substance(s) in concentration below 0.1 % and displayed on a voluntary basis

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.

Component	
Phenol, dodecyl-, branched (121158-58-5)	The substance has been identified as having endocrine disrupting properties, but no additional data are available.

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 02 06* - synthetic engine, gear and lubricating 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

Transport by sea

Not regulated

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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 substance(s) listed on the REACH Candidate List in concentrations ≥ 0.1 % or SCL: Phenol, alkylation products (mainly in para position) with C12-rich branched alkyl chains from oligomerisation, covering any individual isomers and/ or combinations thereof (PDDP) (EC 310-154-3, CAS 121158-58-5)

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
3	Composition/information on ingredients	Modified
9.1	Flash point	Modified
9.1	Viscosity, kinematic	Modified

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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.

Data sources : REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE

COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and

amending Regulation (EC) No 1907/2006.

Other information : None.

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	
EUH208	Contains: Benzenesulphonic acid, methyl mono-C 20 -C 24 branched alkyl derivatives, calcium salts. May produce an allergic reaction.	
EUH210	Safety data sheet available on request.	
Eye Dam. 1	Serious eye damage/eye irritation, Category 1	
H314	Causes severe skin burns and eye damage.	
H317	May cause an allergic skin reaction.	
H318	Causes serious eye damage.	
H360F	May damage fertility.	
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.	
Repr. 1A	Reproductive toxicity, Category 1A	
Skin Corr. 1C	Skin corrosion/irritation, Category 1, Sub-Category 1C	
Skin Sens. 1B	Skin sensitisation, category 1B	

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.

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