



Motor Oil 5W-20 Synthetic

Safety Data Sheet

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

Revision date: 24-2-2017 version: 3.0

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

1.1. Product identifier

Product form : Mixture
 Product name : Motor Oil 5W-20 Synthetic
 Product code : 05000DX1-FE

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, Consumer use
 Industrial/Professional use spec : Used in closed systems
 Use of the substance/mixture : Automotive care products
 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

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

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

EUH-statements : EUH208 - Contains Alkyl alcohol triester with boric acid (H3BO3). May produce an allergic reaction.
 EUH210 - Safety data sheet available on request.

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

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Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based	(CAS-No.) 72623-87-1 (EC-No.) 276-738-4 (EC Index-No.) 649-483-00-5 (REACH-no) 01-2119474889-13	25 - 50	Asp. Tox. 1, H304
Distillates (petroleum), hydrotreated light paraffinic, Baseoil - unspecified.	(CAS-No.) 64742-55-8 (EC-No.) 265-158-7 (EC Index-No.) 649-468-00-3	1 - 9,99	Asp. Tox. 1, H304
Reaction products of benzeneamine, N-phenyl- with nonene (branched)	(CAS-No.) 36878-20-3 (EC-No.) 253-249-4 (REACH-no) 01-2119488911-28	1 - 2,49	Aquatic Chronic 4, H413
Zinc (O,O',O'',O''-tetrakis(1,3-dimethylbutyl)bis(phosphorodithioate)	(CAS-No.) 2215-35-2 (EC-No.) 218-679-9 (REACH-no) 01-2119953275-34	1 - 2,49	Skin Irrit. 2, H315 Eye Dam. 1, H318 Aquatic Chronic 2, H411
Distillates (petroleum), hydrotreated heavy paraffinic, Baseoil - unspecified, [A complex combination of hydrocarbons obtained by treating a petroleum fraction with hydrogen in the presence of a catalyst. It consists of hydrocarbons having carbon numbers predominantly in the range of C20 through C50 and produces a finished oil of at least 100 SUS at 100 °F (19cSt at 40 °C). It contains a relatively large proportion of saturated hydrocarbons.]	(CAS-No.) 64742-54-7 (EC-No.) 265-157-1 (EC Index-No.) 649-467-00-8 (REACH-no) 01-2119484627-xx	1 - 2,49	Asp. Tox. 1, H304
Alkyl alcohol triester with boric acid (H3BO3)	(EC-No.) 806-750-2 (REACH-no) 01-21200079516-48	0,1 - 0,99	Skin Sens. 1, H317
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	0,1 - 0,99	Skin Irrit. 2, H315 Eye Dam. 1, H318 Aquatic Acute 1, H400 Aquatic Chronic 3, H412

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-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

General	: In case of accident or if you feel unwell, seek medical advice immediately (show safety data sheet if possible).
After inhalation	: Take victim to fresh air, in a quiet place and if necessary take medical advice.
After skin contact	: After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of water and soap.
After eye contact	: Wash immediately with lots of water.
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

Symptoms/effects	: In case of accident or if you feel unwell, seek medical advice immediately (show this label if possible).
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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, alcohol-resistant foam, water spray, carbon dioxide.
Unsuitable extinguishing media	: Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

Fire hazard	: Although this substance has flammability data, it is difficult to ignite in air and is classified as non-flammable.
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5.3. Advice for firefighters

Other information	: Use water spray/stream to protect personnel and to cool endangered containers.
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SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures	: 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.

6.1.2. For emergency responders

Protective equipment : Wear respiratory protection. Wear suitable protective clothing and gloves.

6.2. Environmental precautions

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

6.3. Methods and material for containment and cleaning up

For containment : 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

Information on disposal - see Section 13. Information on personal protective equipment - see Chapter 8. Information on safe handling - see Section 7.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Remove all sources of ignition.

Hygiene measures : When using do not eat, drink or smoke. Wash hands before breaks and at the end of work.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Provide for sufficient ventilation and punctiform suction at critical points.

Storage conditions : Store in original container.

Incompatible products : Do not use with strong oxidizing agents, nor with strong acids or strong bases.

Storage temperature : < 40 °C

Storage area : Ensure adequate ventilation of the storage area. Keep container tightly closed and dry.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Distillates (petroleum), hydrotreated heavy paraffinic, Baseoil - unspecified, [A complex combination of hydrocarbons obtained by treating a petroleum fraction with hydrogen in the presence of a catalyst. It consists of hydrocarbons having carbon numbers predominantly in the range of C20 through C50 and produces a finished oil of at least 100 SUS at 100 °F (19cSt at 40 °C). It contains a relatively large proportion of saturated hydrocarbons.] (64742-54-7)

EU	IOELV TWA (mg/m ³)	5
EU	IOELV STEL (mg/m ³)	10 mg/m ³

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

8.2. Exposure controls

Technical measures:

If suction of the immediate vicinity is impossible or insufficient, adequate airing of the working place must be ensured.

Personal protective equipment:

Safety glasses. Gloves.

Materials for protective clothing:

Suitable material: neoprene. nitrile rubber

Hand protection:

Wear suitable gloves.

Type	Material	Permeation	Thickness (mm)	Penetration	Standard
Reusable gloves, Disposable gloves	Nitrile rubber (NBR), Neoprene rubber (HNBR)	5 (> 240 minutes)			

Eye protection:

Safety glasses

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Type	Use	Characteristics	Standard
Safety glasses			

Skin and body protection:

Wear suitable protective clothing.

Respiratory protection:

Not necessary with sufficient ventilation



SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Appearance	: Oily.
Colour	: brown. clear.
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	: No data available
Boiling point	: No data available
Flash point	: > 228 °C ASTM D92
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Density	: 852 g/l @ 15C
Solubility	: Slightly soluble, the product remains on the water surface. Water: practically insoluble
Log Pow	: No data available
Viscosity, kinematic	: 49 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

None under normal use.

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

None under normal use.

10.5. Incompatible materials

Oxidizing substances. Acids and bases.

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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

Distillates (petroleum), hydrotreated light paraffinic, Baseoil - unspecified. (64742-55-8)	
LD50 oral rat	> 5000 mg/kg
LD50 dermal rabbit	> 3000 mg/kg

Reaction products of benzeneamine, N-phenyl- with nonene (branched) (36878-20-3)	
LD50 oral rat	> 5000 mg/kg (OECD 401 method)
LD50 dermal rat	> 2000 mg/kg (OECD 402 method)

Phosphorodithioic acid, mixed 0,0-bis(1,3-dimethylbutyl and iso-Pr)esters, zinc salts (84605-29-8)	
LD50 oral rat	3600 mg/kg OECD 401
LD50 dermal rat	20000 mg/kg OECD 402

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

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Viscosity, kinematic	49 mm ² /s 40°C

SECTION 12: Ecological information

12.1. Toxicity

Reaction products of benzeneamine, N-phenyl- with nonene (branched) (36878-20-3)	
LC50 fish 1	> 100 mg/l @ 96h
LC50 other aquatic organisms 1	600 mg/l @ 72h (Algae)
EC50 Daphnia 1	51 mg/l @ 48h
EC50 72h algae (1)	> 100 mg/l
NOEC chronic algae	33 mg/l @ 96h

Zinc (O,O,O',O'-tetrakis(1,3-dimethylbutyl)bis(phosphorodithioate) (2215-35-2)	
LC50 fish 1	46 mg/l @ 96h
NOEC chronic fish	< 26 mg/l @ 96h

Phosphorodithioic acid, mixed 0,0-bis(1,3-dimethylbutyl and iso-Pr)esters, zinc salts (84605-29-8)	
LC50 fish 1	4,5 mg/l Oncorhynchus mykiss
LC50 fish 2	46 mg/l Cyprinodon variegatus
EC50 Daphnia 1	23 mg/l
EC50 Daphnia 2	0,8 mg/l @21d
EC50 other aquatic organisms 2	10000 mg/l @0.1d - Chlorophyta
EC50 72h algae (1)	21 mg/l @3d - Chlorophyta
NOEC (acute)	1,8 mg/l @4d - Oncorhynchus mykiss
NOEC (chronic)	10 mg/l @2d - Daphnia
NOEC chronic fish	0,4 mg/l @21d - Daphnia
NOEC chronic algae	10 mg/l @3d - Chlorophyta

12.2. Persistence and degradability

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Persistence and degradability	Not soluble in water, so only minimally biodegradable.

Reaction products of benzeneamine, N-phenyl- with nonene (branched) (36878-20-3)	
Persistence and degradability	Poorly biodegradable.

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Reaction products of benzeneamine, N-phenyl- with nonene (branched) (36878-20-3)	
Biodegradation	0 % Sturm-test @28d
Zinc (O,O,O',O'-tetrakis(1,3-dimethylbutyl)bis(phosphorodithioate) (2215-35-2)	
Persistence and degradability	Poorly biodegradable.
Biodegradation	1,5 % @28d
Phosphorodithioic acid, mixed 0,0-bis(1,3-dimethylbutyl and iso-Pr)esters, zinc salts (84605-29-8)	
Persistence and degradability	Poorly biodegradable.
Biodegradation	1,5 % @28d OECD TG 301 B

12.3. Bioaccumulative potential

Reaction products of benzeneamine, N-phenyl- with nonene (branched) (36878-20-3)	
Bioconcentration factor (BCF REACH)	1730
Log Kow	3,6 @0.1d
Bioaccumulative potential	Moderate bioconcentration.
Zinc (O,O,O',O'-tetrakis(1,3-dimethylbutyl)bis(phosphorodithioate) (2215-35-2)	
Bioconcentration factor (BCF REACH)	< 100
Log Kow	2,21
Bioaccumulative potential	not bioaccumulable.
Phosphorodithioic acid, mixed 0,0-bis(1,3-dimethylbutyl and iso-Pr)esters, zinc salts (84605-29-8)	
Log Kow	0,56 Measurements
Bioaccumulative potential	not bioaccumulable.

12.4. Mobility in soil

Reaction products of benzeneamine, N-phenyl- with nonene (branched) (36878-20-3)	
Log Koc	> 2000
Soil	Low mobility (soil).
Zinc (O,O,O',O'-tetrakis(1,3-dimethylbutyl)bis(phosphorodithioate) (2215-35-2)	
Soil	No information available.
Phosphorodithioic acid, mixed 0,0-bis(1,3-dimethylbutyl and iso-Pr)esters, zinc salts (84605-29-8)	
Soil	No information available.

12.5. Results of PBT and vPvB assessment

Component	
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based (72623-87-1)	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
Reaction products of benzeneamine, N-phenyl- with nonene (branched) (36878-20-3)	This substance does not meet the PBT/vPvB criteria of REACH, annex XIII.
Zinc (O,O,O',O'-tetrakis(1,3-dimethylbutyl)bis(phosphorodithioate) (2215-35-2)	This substance does not meet the PBT/vPvB criteria of REACH, annex XIII.
Phosphorodithioic acid, mixed 0,0-bis(1,3-dimethylbutyl and iso-Pr)esters, zinc salts (84605-29-8)	This substance does not meet the PBT/vPvB criteria of REACH, annex XIII.

12.6. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional legislation (waste)	: Waste disposal according to official state regulations.
European List of Waste (LoW) code	: 13 02 00 - Waste engine, gear and lubricating oils. 13 02 05- Mineral-based non-chlorinated engine, gear and lubricating oils. 15 01 10 Packaging containing residues of or contaminated by dangerous substances.

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
Not applicable	Not applicable

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ADR	IMDG
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	
Not applicable	Not applicable
No supplementary information available	

14.6. Special precautions for user

- Overland transport

Not applicable

- Transport by sea

Not applicable

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 Acute 1	Hazardous to the aquatic environment — Acute Hazard, Category 1
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
Asp. Tox. 1	Aspiration hazard, Category 1
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1	Skin sensitisation, Category 1
H304	May be fatal if swallowed and enters airways
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H318	Causes serious eye damage
H400	Very toxic to aquatic life
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.
EUH208	Contains . May produce an allergic reaction.
EUH210	Safety data sheet available on request.

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

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