



# MPM Industrial Gear Oil 100

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878  
Issue date: 26-10-2020 Revision date: 8-2-2023 Supersedes: 2-2-2023 version: 5.2

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

#### 1.1. Product identifier

Product form : Mixture  
Trade name : MPM Industrial Gear Oil 100  
Product code : 39000C  
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

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

##### 1.2.2. Uses advised against

No additional information available.

#### 1.3. Details of the supplier of the safety data sheet

##### Manufacturer

MPM International Oil Company  
Cyclotronweg 1  
2629 HN Delft - Nederland  
T +31 (0)15 2514030  
[pvhoorn@mpmoil.com](mailto:pvhoorn@mpmoil.com) - [www.mpmoil.com](http://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

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.

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### 2.3. Other hazards

Contains no PBT/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 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]
Polysulphides, di-tert-Bu	CAS-No.: 68937-96-2 EC-No.: 273-103-3 REACH-no: 01-2119540515-43	$\leq 0,99$	Skin Sens. 1B, H317 Aquatic Chronic 3, H412
Reaction products of bis(4-methylpentan-2-yl)dithiophosphoric acid with phosphorus oxide, propylene oxide and amines, C12-14-alkyl (branched)	EC-No.: 931-384-6 REACH-no: 01-2119493620-38	$\geq 0,1 - \leq 0,24$	Acute Tox. 4 (Oral), H302 Eye Dam. 1, H318 Skin Sens. 1, H317 Aquatic Chronic 2, H411
(Z)-N-9-octadecenyl-1,3-diaminopropane	CAS-No.: 7173-62-8 EC-No.: 230-528-9 REACH-no: 01-2119487002-46	$\geq 0,01 - \leq 0,024$	Acute Tox. 4 (Oral), H302 Skin Corr. 1B, H314 Eye Dam. 1, H318 STOT RE 1, H372 Aquatic Acute 1, H400 (M=10) Aquatic Chronic 1, H410
Methyl-1H-benzotriazole	CAS-No.: 29385-43-1 EC-No.: 249-596-6 REACH-no: 01-2119979081-35	$\leq 0,0099$	Acute Tox. 4 (Oral), H302 Repr. 2, H361d Aquatic Chronic 2, H411

### Specific concentration limits

Name	Product identifier	Specific concentration limits
Polysulphides, di-tert-Bu	CAS-No.: 68937-96-2 EC-No.: 273-103-3 REACH-no: 01-2119540515-43	( $46 \leq C < 100$ ) Skin Sens. 1B, H317
Reaction products of bis(4-methylpentan-2-yl)dithiophosphoric acid with phosphorus oxide, propylene oxide and amines, C12-14-alkyl (branched)	EC-No.: 931-384-6 REACH-no: 01-2119493620-38	( $9,39 \leq C < 100$ ) Skin Sens. 1, H317 ( $50 \leq C < 100$ ) Eye Dam. 1, H318 ( $50 \leq C < 100$ ) Eye Irrit. 2, H319

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

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

After inhalation : Not required.

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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.
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#### 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.
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### 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.

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### 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

##### 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/m<sup>3</sup> 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

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### 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

Hand protection					
Type	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	: > 220 °C @ ASTM D92
Auto-ignition temperature	: Not available
Decomposition temperature	: Not available
pH	: Not available
Viscosity, kinematic	: 100 mm <sup>2</sup> /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	: 886 kg/m <sup>3</sup> @ 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

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Polysulphides, di-tert-Bu (68937-96-2)	
Boiling point	186 °C
Flash point	89 °C
Vapour pressure	15,6 Pa @ 20 °C

(Z)-N-9-octadecenyl-1,3-diaminopropane (7173-62-8)	
Boiling point	> 150 °C
Flash point	184 °C
Vapour pressure	0,0015 Pa @ 20 °C

Methyl-1H-benzotriazole (29385-43-1)	
Flash point	190 °C
Vapour pressure	≈ 0,0143 kPa @ 25 °C

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

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### Reaction products of bis(4-methylpentan-2-yl)dithiophosphoric acid with phosphorus oxide, propylene oxide and amines, C12-14-alkyl (branched)

ATE CLP (oral)	500 mg/kg bodyweight
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### (Z)-N-9-octadecenyl-1,3-diaminopropane (7173-62-8)

ATE CLP (oral)	500 mg/kg bodyweight
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### Methyl-1H-benzotriazole (29385-43-1)

ATE CLP (oral)	500 mg/kg bodyweight
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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)-N-9-octadecenyl-1,3-diaminopropane (7173-62-8)

STOT-repeated exposure	Causes damage to organs through prolonged or repeated exposure.
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Aspiration hazard	: Not classified
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### MPM Industrial Gear Oil 100

Viscosity, kinematic	100 mm <sup>2</sup> /s @ 40°C
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## 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 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 (acute)	: Not classified
Hazardous to the aquatic environment, long-term (chronic)	: Not classified

### Polysulphides, di-tert-Bu (68937-96-2)

EC50 Daphnia 1	63 mg/l @2d
EC50 72h - Algae [2]	> 100 mg/l
EC50 96h - Algae [1]	> 10000 mg/l Slib @0.1DY

### (Z)-N-9-octadecenyl-1,3-diaminopropane (7173-62-8)

LC50 fish 1	> 0,1 mg/l (Brachydanio rerio)
EC50 Daphnia 1	> 0,01 mg/l (Daphnia magna)
EC50 72h - Algae [1]	> 0,01 mg/l
NOEC chronic crustacea	> 0,001 @21DY (Daphnia maga)

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Methyl-1H-benzotriazole (29385-43-1)	
LC50 fish 1	25,5 mg/l (Pimephales promelas)
LC50 fish 2	65 mg/l (Brachydanio rerio)
EC50 Daphnia 1	87,4 mg/l (Daphnia magna)
EC50 Daphnia 2	8,58 mg/l (Daphnia magna)
EC50 72h - Algae [1]	62 mg/l (Selenastrum capricomutum)
ErC50 (algae)	75 mg/l @ OECD Guideline 201, Pseudokirchnerielle subcapitata
NOEC chronic crustacea	184 mg/l @21DY (Daphnia magna)

### 12.2. Persistence and degradability

MPM Industrial Gear Oil 100	
Persistence and degradability	Not soluble in water, so only minimally biodegradable.
Polysulphides, di-tert-Bu (68937-96-2)	
Biodegradation	13 % @OECD TG @28d

### 12.3. Bioaccumulative potential

Polysulphides, di-tert-Bu (68937-96-2)	
Log Kow	6
Methyl-1H-benzotriazole (29385-43-1)	
Log Kow	1,71

### 12.4. Mobility in soil

MPM Industrial Gear Oil 100	
Soil	Prevent soil and water pollution.

### 12.5. Results of PBT and vPvB assessment

No additional information available.

### 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) code : 13 02 05\* - mineral-based non-chlorinated engine, gear and lubricating oils

## SECTION 14: Transport information

In accordance with ADR / IMDG



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### 14.1. UN number or ID number

UN-No. : Not regulated  
UN-No. (IMDG) : Not regulated

### 14.2. UN proper shipping name

Proper Shipping Name (ADR) : Not regulated  
Proper Shipping Name (IMDG) : 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) : Not regulated  
Packing group (IMDG) : Not regulated

### 14.5. Environmental hazards

Dangerous for the environment : No  
Marine pollutant : No  
Other information : 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  
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

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

## SECTION 16: Other information

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

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Full text of H- and EUH-statements	
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
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
Aquatic Chronic 3	Hazardous to the aquatic environment – Chronic Hazard, Category 3
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
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H361d	Suspected of damaging the unborn child
H372	Causes damage to organs through prolonged or repeated exposure.
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.
H412	Harmful to aquatic life with long lasting effects.
Repr. 2	Reproductive toxicity, Category 2
Skin Corr. 1B	Skin corrosion/irritation, Category 1, Sub-Category 1B
Skin Sens. 1	Skin sensitisation, Category 1
Skin Sens. 1B	Skin sensitisation, category 1B
STOT RE 1	Specific target organ toxicity – Repeated exposure, Category 1

### 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.