



# MPM BorgWarner Fluid GEN VI

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878  
Issue date: 17/02/2023 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 BorgWarner Fluid GEN VI
Product code	: 50000BW-VI
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](mailto:info@mpmoil.com), [www.mpmoil.com](http://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	: EUH208 - Contains: C14-18 alpha-olefin epoxide, reaction products with boric acid. May produce an allergic reaction. EUH210 - Safety data sheet available on request.

#### 2.3. Other hazards

The product does not meet the PBT and vPvB classification criteria  
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 %

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### 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]
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	≥ 75 – ≤ 90	Asp. Tox. 1, H304
Zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate)	CAS-No.: 4259-15-8 EC-No.: 224-235-5 REACH-no: 01-2119493635-27	< 2.5	Eye Dam. 1, H318 Aquatic Chronic 2, H411
C14-18 alpha-olefin epoxide, reaction products with boric acid	EC-No.: 939-580-3 REACH-no: 01-2119976364-28	< 1	Skin Sens. 1B, H317

#### 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 (50 ≤ 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.  
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

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### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

- Suitable extinguishing media : Water spray, powder, foam and CO<sub>2</sub>.  
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.

#### 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.

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

Hand protection					
Type	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.
Colour	: Amber.
Appearance	: Oily liquid.
Odour	: Characteristic.
Odour threshold	: Not available
Melting point	: -54 °C
Freezing point	: Not available
Boiling point	: Not available
Flammability (solid, gas)	: Not available
Lower explosion limit	: Not available

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Upper explosion limit	: Not available
Flash point	: > 212 °C @ ASTM D92
Auto-ignition temperature	: Not available
Decomposition temperature	: Not available
pH	: Not available
Viscosity, kinematic	: 29 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	: 847 kg/m <sup>3</sup> @ 15°C (DIN EN ISO 12185)
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.

### 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 (Based on available data, the classification criteria are not met.)
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified

#### Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based (72623-87-1)

LD50 oral rat	> 5000 mg/kg bodyweight OECD 401
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#### 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 corrosion/irritation	: Not classified
Additional information	: Repeated exposure may cause skin dryness or cracking.
Serious eye damage/irritation	: Not classified (Based on available data, the classification criteria are not met.)

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Additional information	: Slightly irritant to eyes
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
Additional information	: At high concentrations, the vapours can be irritating to the respiratory system

### MPM BorgWarner Fluid GEN VI

Viscosity, kinematic	29 mm <sup>2</sup> /s @ 40°C
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### Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based (72623-87-1)

Viscosity, kinematic	1.99 – 847 mm <sup>2</sup> /s @ 40°C
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## 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 %
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### Other information

Other information	: When used and handled according to specifications, the product does not have any harmful effects to our experience and the information provided to us.
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## SECTION 12: Ecological information

### 12.1. Toxicity

General	: Based on available data, the classification criteria are not met.
Hazardous to the aquatic environment, short-term (acute)	: Not classified (Based on available data, the classification criteria are not met.)
Hazardous to the aquatic environment, long-term (chronic)	: Not classified

### Zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate) (4259-15-8)

LC50 fish 1	10 – 35 mg/l 96h Pimephales promelas (semi static)
LC50 fish 2	1 – 5 mg/l 96h Pimephales promelas (static)
EC50 Daphnia 1	1 – 1.5 mg/l 48h Daphnia magna
EC50 other aquatic organisms 1	1 – 5 mg/l 96h Pseudokirchneriella subcapitata
EC50 96h - Algae [1]	240 mg/l Scenedesmus Subspicatus OECD 201 @21d
NOEC (chronic)	0.4 mg/l Daphnia Magna OECD211 @21d
NOEC (acute)	NOEC Acute 220 mg/l Scenedesmus Subspicatus OECD 201-biomass

### C14-18 alpha-olefin epoxide, reaction products with boric acid

LC50 fish 1	> 100 mg/l (Oncorhynchus mykiss)
EC50 Daphnia 1	> 100 mg/l (Daphnia magna)
EC50 72h - Algae [1]	> 100 mg/l (Selenastrum capricornutum)
NOEC (acute)	NOEC Acute 32 mg/l @ 2DY (Daphnia Magna)

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### 12.2. Persistence and degradability

#### MPM BorgWarner Fluid GEN VI

Persistence and degradability	Not readily biodegradable.
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#### Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based (72623-87-1)

Persistence and degradability	Rapidly degradable
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#### Zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate) (4259-15-8)

Persistence and degradability	Rapidly degradable
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#### C14-18 alpha-olefin epoxide, reaction products with boric acid

Persistence and degradability	Rapidly degradable
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### 12.3. Bioaccumulative potential

#### MPM BorgWarner Fluid GEN VI

Bioaccumulative potential	Not applicable to mixtures.
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#### Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based (72623-87-1)

Bioaccumulative potential	highly bioaccumulative.
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#### C14-18 alpha-olefin epoxide, reaction products with boric acid

Log Kow	9.4 Calc.
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### 12.4. Mobility in soil

#### MPM BorgWarner Fluid GEN VI

Soil	Spilled material can penetrate into the ground and thus contaminate groundwater. Prevent soil and water pollution.
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### 12.5. Results of PBT and vPvB assessment

#### MPM BorgWarner Fluid GEN VI

The product does not meet the PBT and vPvB classification criteria
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### 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

Other adverse effects : Avoid release to the environment.

## 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 05* - mineral-based non-chlorinated engine, gear and lubricating oils

## SECTION 14: Transport information

In accordance with ADR / IMDG

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ADR	IMDG
<b>14.1. UN number or ID number</b>	
Not regulated for transport	
<b>14.2. UN proper shipping name</b>	
Not regulated	Not regulated
<b>14.3. Transport hazard class(es)</b>	
Not regulated	Not regulated
<b>14.4. Packing group</b>	
Not regulated	Not regulated
<b>14.5. Environmental hazards</b>	
Not regulated	Not regulated
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

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

##### 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)



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### 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 additional information available

## SECTION 16: Other information

### Full text of H- and EUH-statements:

Aquatic Chronic 2	Hazardous to the aquatic environment – Chronic Hazard, Category 2
Asp. Tox. 1	Aspiration hazard, Category 1
EUH208	Contains: C14-18 alpha-olefin epoxide, reaction products with boric acid. 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
H304	May be fatal if swallowed and enters airways.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H411	Toxic to aquatic life with long lasting effects.
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.