MPM Industrial Gear Oil 320

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878
Issue date: 27/02/2012 Revision date: 04/12/2025 Supersedes: 03/03/2016 version: 5.0

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 320
Product code	:	39000F
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,Industrial use,Consumer 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]

Safety data sheet available on request.

EUH210

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

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.

2.3. Other hazards

Contains no PBT and/or 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 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 %

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]
Polysulphides, di-tert-Bu	CAS-No.: 68937-96-2 EC-No.: 273-103-3 REACH-no: 01-2119540515-43	≥ 0.1 – ≤ 0.99	Skin Sens. 1B, H317 Aquatic Chronic 3, H412
Phosphoric acid ester amine salt	EC-No.: 931-384-6 REACH-no: 01-2119493620-38	≥ 0.1 – ≤ 0.49	Acute Tox. 4 (Oral), H302 Eye Irrit. 2, H319 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	≥ 0.01 – ≤ 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

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 ≤ C < 100) Skin Sens. 1B; H317
Phosphoric acid ester amine salt	EC-No.: 931-384-6 REACH-no: 01-2119493620-38	(9.39 ≤ C < 100) Skin Sens. 1; H317 (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

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.

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

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 : Not available

Freezing point	:	-21 °C
Boiling point	:	Not available
Flammability (solid, gas)	:	Not available
Lower explosion limit	:	Not available
Upper explosion limit	:	Not available
Flash point	:	> 255 °C ASTM D92
Auto-ignition temperature	:	Not available
Decomposition temperature	:	Not available
pH	:	Not available
Viscosity, kinematic	:	330 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	:	900 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.

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

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

Phosphoric acid ester amine salt	
ATE CLP (oral)	500 mg/kg bodyweight

Skin corrosion/irritation	:	Not classified
Additional information	:	Repeated or prolonged skin contact may cause irritation

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.

Phosphoric acid ester amine salt	
NOAEL (oral, rat, 90 days)	150 mg/kg bodyweight/day @28d (OECD 407)

Aspiration hazard : Not classified

MPM Industrial Gear Oil 320	
Viscosity, kinematic	330 mm²/s @ 40°C

(Z)-N-9-octadecenyl-1,3-diaminopropane (7173-62-8)	
Viscosity, kinematic	13.08 mm²/s

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 %

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 mg/l @21DY (Daphnia maga)

Phosphoric acid ester amine salt	
LC50 fish 1	24 mg/l @4d Oncorhynchus mykiss
LC50 fish 2	8.5 mg/l Pimephales promelas @4d
EC50 Daphnia 1	91.4 mg/l Daphnia magna

Phosphoric acid ester amine salt	
EC50 72h - Algae [1]	6.4 mg/l Selenastrum capricornutum
NOEC chronic fish	3.2 mg/l Oncorhynchus mykiss @4d
NOEC chronic crustacea	0.12 mg/l Daphnia magna @2d
NOEC chronic algae	1.7 mg/l Selenastrum capricornutum @4d

12.2. Persistence and degradability

MPM Industrial Gear Oil 320	
Persistence and degradability	Not soluble in water, so only minimally biodegradable.

Polysulphides, di-tert-Bu (68937-96-2)	
Persistence and degradability	May cause long-term adverse effects in the environment.
Biodegradation	13 % @OECD TG @28d

(Z)-N-9-octadecenyl-1,3-diaminopropane (7173-62-8)	
Persistence and degradability	May cause long-term adverse effects in the environment.

Phosphoric acid ester amine salt	
Persistence and degradability	Rapidly degradable
BOD (% of ThOD)	3.6 % ThOD @28d inherent sediment
Biodegradation	7.4 % Sturm (28d) OECD TG 301B

12.3. Bioaccumulative potential

Polysulphides, di-tert-Bu (68937-96-2)	
Log Kow	6
Bioaccumulative potential	Not established.

(Z)-N-9-octadecenyl-1,3-diaminopropane (7173-62-8)	
Bioaccumulative potential	Not established.

12.4. Mobility in soil

No additional information available

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

Polysulphides, di-tert-Bu (68937-96-2)	
Other information	Avoid release to the environment.

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

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

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 (2024/590)

Not listed on the Ozone Depletion list (Regulation EU 2024/590)
Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 2024/590 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 additional information available

SECTION 16: Other information

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
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
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.
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.

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.