

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878 Issue date: 01/05/2018 Revision date: 28/08/2024 Supersedes: 13/11/2020 version: 3.0

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

1.1. Product identifier

Product form : Mixture

Trade name : MPM Coolant Low Phosphate -37°C Ready to Use

UFI : KTVV-20Y6-E002-VSMA

Product code : 86000CLP

Type of product : Anti-freezing agents

Product group : Mixture

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
: Anti-freezing agents

Use of the substance/mixture : Anti-freezing agents Function or use category : Anti-freezing agents

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 BV Cyclotronweg 1 2629 HN Delft - Nederland T +31 (0)15 2514030

info@mpmoil.com - www.mpmoil.com

1.4. Emergency telephone number

Emergency number : +31 (0)15 2514030 (08.00 - 17.00 GMT+1)

Country	Organisation/Company	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)	

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Acute toxicity (oral), Category 4 H302 Specific target organ toxicity – Repeated exposure, Category 2 H373

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

Adverse physicochemical, human health and environmental effects

No additional information available

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2.2. Label elements

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

Hazard pictograms (CLP)





GHS07

GHS08

CLP Signal word : WARNING.
Contains : 1,2 ethanediol

Hazard statements (CLP) : H302 - Harmful if swallowed.

H373 - May cause damage to organs (kidneys) through prolonged or repeated exposure

(oral).

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

P260 - Do not breathe mist, vapours.

P264 - Wash hands thoroughly after handling.

P270 - Do not eat, drink or smoke when using this product.

P101 - If medical advice is needed, have product container or label at hand. P301+P310 - IF SWALLOWED: Immediately call a POISON CENTER/doctor.

P501 - Dispose of contents/container in accordance with local and national regulations.

Nordic countries regulation

Norway

Declaration number : 653443

Sweden

Swedish product registration number : 687704-7

2.3. Other hazards

Mixture does not contain substance (s) classified as PBT or vPvB in concentrations above 0,1%. 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

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
1,2 ethanediol	CAS-No.: 107-21-1 EC-No.: 203-473-3 EC Index-No.: 603-027-00-1 REACH-no: 01-2119456816- 28	≥ 40 – ≤ 49	Acute Tox. 4 (Oral), H302 STOT RE 2, H373
Methyl-1H-benzotriazole	CAS-No.: 29385-43-1 EC-No.: 249-596-6 REACH-no: 01-2119979081- 35	≥ 0.05 – ≤ 0.5	Acute Tox. 4 (Oral), H302 Repr. 2, H361d Aquatic Chronic 2, H411

Comments

: Contains a small amount of Bitrex (> 25 ppm), also known as Denatonium Benzoate. More information under section 11.

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

General : Remove the victim away from contaminated area. If unconscious, place in the recovery

position and seek medical advice.

After inhalation : If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable

for breathing.

After skin contact : Remove affected clothing and wash all exposed skin area with mild soap and water,

followed by warm water rinse. If skin irritation or rash occurs: Get medical advice/attention.

After eye contact : IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if

present and easy to do. Continue rinsing. Consult an ophtalmologist if irritation persists.

After ingestion : Do NOT induce vomiting. If the person is fully conscious, make him/her drink plenty of

water. Never give an unconscious person anything to drink. Get immediate medical

advice/attention.

4.2. Most important symptoms and effects, both acute and delayed

After inhalation : Harmful if inhaled.

After skin contact : May cause skin irritation / dermatitis.

After eye contact : Causes eye irritation.

After ingestion : Harmful if swallowed.

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. Fight larger fires with water spray or alcohol resistant

foam.

Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

Fire hazard : On exposure to high temperature, may decompose, releasing toxic vapours.

Hazardous decomposition products in case of fire : Carbon monoxide (CO). Carbon dioxide (CO2). Nitrogen oxides (NOx).

5.3. Advice for firefighters

Precautionary measures fire : Do not enter fire area without proper protective equipment, including respiratory protection.

Other information : Cool containers / tanks with spray water if possible. Use a water spray to cool exposed

surfaces and to protect fire-fighters.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Ventilate well. Use protective clothing. Mark out the contaminated area with signs and

prevent access to unauthorized personnel.

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 suitable protective clothing and eye/face protection. Breathing apparatus.

6.2. Environmental precautions

Dilute with plenty of water. Avoid release to the environment.

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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 : Small quantities of liquid spill: take up in non-combustible absorbent material and shovel

into container for disposal.

Other information : Provide adequate ventilation.

6.4. Reference to other sections

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

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Provide local exhaust or general room ventilation. Avoid aerosol formation.

Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the

product

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Ensure adequate ventilation, especially in confined areas. Store in tightly closed, leak-proof

containers. Keep in a cool, well-ventilated place away from heat.

Storage conditions : Keep container tightly closed. Incompatible products : Strong bases. Oxidizing agent.

Information on mixed storage : Keep in a cool, well-ventilated place away from acids.

Storage area : Keep in a cool, well-ventilated place. Keep away from food, drink and animal feedingstuffs.

: Keep only in the original container in a cool, well-ventilated place away from combustible

materials.

7.3. Specific end use(s)

Anti-freezing agents.

Packaging materials

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1. National occupational exposure and biological limit values

1,2 ethanediol (107-21-1)		
EU - Indicative Occupational Exposure Limit (IOEL)		
IOELV TWA (mg/m³)	52 mg/m³	
IOELV TWA (ppm)	20 ppm	
EU - Binding Occupational Exposure Limit (BOEL)		
BOEL TWA	104 mg/m³ TGG 15 min.	
	40 ppm	

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

No additional information available

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8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Technical measures:

Ensure good ventilation of the work station.

8.2.2. Personal protection equipment

Personal protective equipment:

Gloves. Protective goggles.

Personal protective equipment symbol(s):





8.2.2.1. Eye and face protection

Eye protection:

No special eye protection equipment recommended under normal conditions of use. Eye protection should only be necessary where hot liquid could be splashed or sprayed

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

8.2.2.3. Respiratory protection

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

Environmental exposure controls:

Avoid release to the environment.

Other information:

Do not eat, drink or smoke when using this product. Avoid contact with skin.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid.

Colour : Blue.

Appearance : Hygroscopic.

Odour : Slight.

Odour threshold : Not available

Melting point : -36.5 °C

Boiling point : 173 – 185 °C ASTM D 1120

Flammability : Not available

Explosive properties : Product is not explosive.

Oxidising properties : No oxidising properties.

Explosive limits : Not available
Lower explosion limit : Not available
Upper explosion limit : Not available

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Flash point : 122 °C
Auto-ignition temperature : 398 °C
Decomposition temperature : Not available
pH : 8.3 @ 20°C
Viscosity, kinematic : Not determined.

Solubility : In water, material soluble.

Log Kow Not available Vapour pressure Not available Vapour pressure at 50°C : Not available : 1059 kg/m³ @ 20°C Density Relative density : Not available Relative vapour density at 20°C Not available Particle size Not determined Particle size distribution : 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

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

No information available.

10.2. Chemical stability

No additional information available

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Contact with incompatible materials.

10.5. Incompatible materials

No information available.

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) : Ingestion of ethylene glycol may result in nausea, vomiting, abdominal cramps, blindness,

liver injuries, irritation, reproductive disorders, nerve injuries, convulsions, pulmonary oedema, cardiopulmonary disorders (metabolic acidosis), pneumonia and renal insufficiency which may result in death. A single dose of about 100 ml is fatal to humans. Inhalation of high concentrations of vapors or mists over a long period of time also has toxic effects.

: May cause an allergic skin reaction.

Acute toxicity (dermal)

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Acute toxicity (inhalation)	At high concentrations, vapours/mist may irritate throat and respiratory system and cause coughing.
Additional information :	Occupational exposure to the substance or mixture may cause adverse effects. The mixture contains a small amount of Bitrex, which is a bittering agent and is a general description of chemical additives that are added to dangerous products to give it a bitter taste, which creates a strong aversion and as such prevents accidental poisonings for young people in particular children and pets. There are a number of possible chemicals that can be used, but the best known is the Denatonium benzoate (CAS 3734-33-6).

	can be used, but the best known is the Denatonium benzoate (CAS 3734-33-6).			
MPM Coolant Low Phosphate -37°C Ready to Use				
ATE CLP (oral)	506.614 mg/kg bodyweight			
1,2 ethanediol (107-21-1)				
LD50 dermal	> 3500 mg/kg (Mouse)			
LC50 Inhalation - Rat	> 2.5 mg/l 6h			
ATE CLP (oral)	500 mg/kg bodyweight			
Methyl-1H-benzotriazole (29385-43	-1)			
ATE CLP (oral)	720 mg/kg bodyweight			
Skin corrosion/irritation	: Not classified (Based on available data, the classification criteria are not met.)			
Serious eye damage/irritation	 pH: 8.3 @ 20°C Not classified (Based on available data, the classification criteria are not met.) pH: 8.3 @ 20°C 			
Respiratory or skin sensitisation	: Not classified (Based on available data, the classification criteria are not met.)			
Germ cell mutagenicity	: Not classified (Based on available data, the classification criteria are not met.)			
Carcinogenicity	: Not classified (Based on available data, the classification criteria are not met.)			
Reproductive toxicity	: Not classified (Based on available data, the classification criteria are not met.)			
STOT-single exposure	: Not classified (Based on available data, the classification criteria are not met.)			
STOT-repeated exposure	: May cause damage to organs (kidneys) through prolonged or repeated exposure (oral).			
1,2 ethanediol (107-21-1)				
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.			
Aspiration hazard	: Not classified (Based on available data, the classification criteria are not met.)			
MPM Coolant Low Phosphate -37°0	C Ready to Use			
Min annita di binamatia	Net determined			

MPM Coolant Low Phosphate -37°C Ready to Use	
Viscosity, kinematic	Not determined.

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 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 %

11.2.2. Other information

Other information

: The mixture contains a small amount of Bitrex, which is a bittering agent and is a general description of chemical additives that are added to dangerous products to give it a bitter taste, which creates a strong aversion and as such prevents accidental poisonings for young people in particular children and pets. There are a number of possible chemicals that can be used, but the best known is the Denatonium benzoate (CAS 3734-33-6).

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SECTION 12: Ecological information

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General

- : This product contains hazardous components for the environment. However, uncontrolled discharge into the environment can cause pollution of various environmental elements (soil,
 - subsoil, aboveground water, aquifers).

Hazardous to the aquatic environment, short–term (acute)

: Not classified (Based on available data, the classification criteria are not met.) (Based on available data, the classification criteria are not met.)

Hazardous to the aquatic environment, long-term (chronic)

: Not classified (Based on available data, the classification criteria are not met.) (Based on available data, the classification criteria are not met.)

(CITIOTIC)	available data, the classification chieffa are not met.)
1,2 ethanediol (107-21-1)	
LC50 fish 1	72860 mg/l @96h Dikkop witvis (Pimephales promelas)
EC50 Daphnia 1	> 100 mg/l OECD 202 (Daphnia magna)
EC50 96h - Algae [1]	6500 – 13000 mg/l (EPA 600/9-78-018)
NOEC (chronic)	≥ 1000 mg/l Mysidopsis bahia (Duration: 23 d)
NOEC chronic fish	15380 mg/l (EPA EPA 600/4-89/001 (7d), Pimephales promelas) semi-static
NOEC chronic crustacea	8590 mg/l (EPA 600/4-89/001, Ceriodaphnia dubia)
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

12.2. Persistence and degradability

NOEC chronic crustacea

MPM Coolant Low Phosphate -37°C Ready to Use		
Persistence and degradability	Readily biodegradable.	
1,2 ethanediol (107-21-1)		
Persistence and degradability Readily biodegradable.		

184 mg/l @21DY (Daphnia magna)

12.3. Bioaccumulative potential

MPM Coolant Low Phosphate -37°C Ready to Use			
Bioaccumulative potential	No relevant information available.		
1,2 ethanediol (107-21-1)			
Log Pow	-1.36		
Methyl-1H-benzotriazole (29385-43-1)			
Log Kow	1.71		

12.4. Mobility in soil

MPM Coolant Low Phosphate -37°C Ready to Use	
Soil	Prevent soil and water pollution.

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12.5. Results of PBT and vPvB assessment

MPM Coolant Low Phosphate -37°C Ready to Use

Mixture does not contain substance (s) classified as PBT or vPvB in concentrations above 0,1%.

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

Regional waste regulation : Comply with local regulations for disposal.

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) : 16 01 14* - antifreeze fluids containing dangerous substances

SECTION 14: Transport information

In accordance with ADR / IMDG

14.1. UN number or ID number

UN-No. (IMDG) : Not regulated : 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

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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

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

Norway

Declaration number : 653443

Norwegian National Regulations : Norwegian Environment Agency.

Sweden

Swedish product registration number : 687704-7

Swedish National Regulations : KEMI Swedish Chemicals Agency.

15.2. Chemical safety assessment

No additional information available

SECTION 16: Other information

Abbreviations and acr	ronyms
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
BLV	Biological limit value
BOD	Biochemical oxygen demand (BOD)
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
COD	Chemical oxygen demand (COD)
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC50	Median effective concentration
ED	Endocrine disruptor
EC-No.	European Community number
vPvB	Very Persistent and Very Bioaccumulative
SDS	Safety Data Sheet
TRGS	Technical Rules for Hazardous Substances
TLM	Median Tolerance Limit
ThOD	Theoretical oxygen demand (ThOD)
STP	Sewage treatment plant

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Abbreviations and acronyms	
PNEC	Predicted No-Effect Concentration
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
PBT	Persistent Bioaccumulative Toxic
OEL	Occupational Exposure Limit
OECD	Organisation for Economic Co-operation and Development
NOEC	No-Observed Effect Concentration
NOAEC	No-Observed Adverse Effect Concentration
LOAEL	Lowest Observed Adverse Effect Level
LD50	Median lethal dose
N.O.S.	Not Otherwise Specified
NOAEL	No-Observed Adverse Effect Level
LC50	Median lethal concentration
IOELV	Indicative Occupational Exposure Limit Value
IATA	International Air Transport Association
IARC	International Agency for Research on Cancer
IMDG	International Maritime Dangerous Goods
EN	European Standard

Data sources Training advice

Other information

- : Supplier's safety documents. ECHA (European Chemicals Agency).
- Normal use of this product shall imply use in accordance with the instructions on the packaging.
- : The information in this SDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use or disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This MSDS was prepared and is to be used only for this product. If the product is used as a component in another product, this MSDS information may not be applicable.

Full text of H- and EUH-statements	
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Aquatic Chronic 2	Hazardous to the aquatic environment – Chronic Hazard, Category 2
H302	Harmful if swallowed.
H361d	Suspected of damaging the unborn child
H373	May cause damage to organs through prolonged or repeated exposure.
H411	Toxic to aquatic life with long lasting effects.
Repr. 2	Reproductive toxicity, Category 2
STOT RE 2	Specific target organ toxicity – Repeated exposure, Category 2

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.