

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878 Issue date: 10-1-2011 Revision date: 19-7-2022 Supersedes: 21-5-2021 version: 2.0

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

1.1. Product identifier

Product form : Mixture

: Coolant -38°C G11 Ready to Use Product name

Product code : 83000C

: Anti-freezing agents Type of product

: Mixture Product group

## 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

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

MPM International Oil Company

Cyclotronweg 1

2629 HN Delft Delft - Nederland

T +31 (0)15 2514030

info@mpmoil.nl - 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 London	+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]

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

Full text of H-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]

Hazard pictograms (CLP)





GHS07

GHS08

CLP Signal word : Warning Hazardous ingredients : 1,2-ethanediol

Hazard statements (CLP) · H302 - Harmful if swallowed

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

(oral).

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Precautionary statements (CLP) : P260 - Do not breathe dusts or mists.

P264 - Wash the hands thoroughly after handling.

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

P301+P312 - IF SWALLOWED: Call doctor, a POISON CENTER if you feel unwell.

P330 - Rinse mouth.

P501 - Dispose of Contents and container to an approved waste disposal plant.

#### 2.3. Other hazards

No additional information available.

## **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]
Water	(CAS-No.) 7732-18-5 (EC-No.) 231-791-2	≤ 50	Not classified
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	≥ 42,5 – ≤ 47,5	Acute Tox. 4 (Oral), H302
Sodium benzoate	(CAS-No.) 532-32-1 (EC-No.) 208-534-8 (REACH-no) 01-2119460683-35	≥ 0,5 - < 2,5	Eye Irrit. 2, H319
Dipotassium Tetraborate	(CAS-No.) 1332-77-0 (EC-No.) 215-575-5 (REACH-no) 01-2119970730-37	≥ 0,5 – < 1,5	Repr. 2, H361
Specific concentration limits:			
Name	Product identifier	Specific con	centration limits
Dipotassium Tetraborate	(CAS-No.) 1332-77-0 (EC-No.) 215-575-5 (REACH-no) 01-2119970730-37	( 5,2 ≤C < 100)	Repr. 2, H361

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

#### **SECTION 4: First aid measures**

11	Description	of first aid	mageurae
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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.

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#### 5.2. Special hazards arising from the substance or mixture

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

5.3. Advice for firefighters

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.

## 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

Storage conditions : Keep container tightly closed. Store in a well-ventilated place. Hydroscopic liquid.

Incompatible products : Acids and bases.

Storage temperature : 0-40 °C

Information on mixed storage : Keep away from food, drink and animal feeding stuffs.

Storage area : Keep in a cool, well-ventilated place.

Special rules on packaging : Keep only in original container.

Packaging materials : Store always product in container of same material as original container.

#### 7.3. Specific end use(s)

Anti-freezing agents.

#### **SECTION 8: Exposure controls/personal protection**

## 8.1. Control parameters

1,2-ethanediol (107-21-1)	-ethanediol (107-21-1)	
EU	IOELV TWA (mg/m³)	52 mg/m³
EU	IOELV TWA (ppm)	20 ppm
EU	IOELV STEL (mg/m³)	104 mg/m³
EU	IOELV STEL (ppm)	40 ppm
Germany	Notes	

#### 8.2. Exposure controls

#### Technical measures:

Ensure good ventilation of the work station.

## Personal protective equipment:

Gloves. Protective goggles.

Hand protection:	
protective gloves	

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#### 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

## Skin and body protection:

No special clothing/skin protection equipment is recommended under normal conditions of use

#### Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

#### Personal protective equipment symbol(s):





#### **Environmental exposure controls:**

Avoid release to the environment.

### **SECTION 9: Physical and chemical properties**

#### 9.1. Information on basic physical and chemical properties

Physical state : Liquid
Appearance : Hygroscopic.
Colour : Blue.
Odour : Slight.

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 : No data available

Boiling point : 180 (160 - 200) °C ASTM D 1120

Flash point : > 111  $^{\circ}$ C Auto-ignition temperature : > 400  $^{\circ}$ C

Decomposition temperature : No data available Flammability (solid, gas) : Not applicable Vapour pressure : 0,1 mPa

Relative vapour density at 20 °C : No data available
Relative density : 1,13 @ 20 °C
Density : 1064 kg/m³ @ 20 °C
Solubility : In water, material sol

: In water, material soluble. Water: alcoholic

Acetone: Miscibility
Log Pow : No data available
Viscosity, kinematic : 21 mm²/s @ 20°C
Viscosity, dynamic : 23,52 mPa.s @ 20°C
Explosive properties : Product is not explosive.
Oxidising properties : No oxidising properties.
Explosive limits : No data available

9.2. Other information

Miscibility : water,acetone,alcohol

## **SECTION 10: Stability and reactivity**

### 10.1. Reactivity

Stable under normal conditions of use.

#### 10.2. Chemical stability

The product is stable at normal handling and storage conditions.

## 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

#### 10.4. Conditions to avoid

Contact with incompatible materials.

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## 10.5. Incompatible materials

Oxidizing substances. Peroxides, e.g. hydrogen peroxide. Strong acid. Nitrates. Chlorates.

### 10.6. Hazardous decomposition products

On exposure to high temperature, may decompose, releasing: Ketones. Aldehydes.

SECTION 11: 7	<b>Foxicologica</b>	I information
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11.1. Inf	ormation on t	toxicolog	ical effects
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Acute toxicity (oral) : Harmful if swallowed.

Acute toxicity (dermal) : Not classified

Acute toxicity (inhalation) : Not classified

ATE CLP (oral) 526,316 mg/kg bodyweight

## 1.2-ethanediol (107-21-1)

1,2 01141104101 (101 21 1)	
LD50 dermal rat	> 3500 mg/kg
LC50 Inhalation - Rat	> 2,5 mg/l @ 6h

## Sodium benzoate (532-32-1)

Sociality believate (352-32-1)	
LD50 oral rat	3450 mg/kg bodyweight 95% CL: 3150 - 3740
LD50 dermal rabbit	> 2000 mg/kg bodyweight
LC50 Inhalation - Rat	> 12,2 mg/l air

## **Dipotassium Tetraborate (1332-77-0)**

LD50 dermal rabbit	> 2000 mg/kg
LC50 Inhalation - Rat (Dust/Mist)	> 2,04 mg/l/4h
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

#### 1.2-ethanediol (107-21-1)

7	
NOAEL (chronic, oral, animal/male, 2 years)	1000 mg/kg bodyweight
NOAEL (chronic, oral, animal/female, 2 years)	1500 mg/kg bodyweight

Reproductive toxicity : Not classified STOT-single exposure : Not classified

STOT-repeated exposure : May cause damage to organs (kidneys) through prolonged or repeated exposure (oral).

## Sodium benzoate (532-32-1)

	Social Delizoate (552-52-1)	
	NOAEL (oral, rat, 90 days)	> 1000 mg/kg bodyweight
	NOAEL (dermal, rat/rabbit, 90 days)	> 2500 mg/kg bodyweight EPA OPP 82-2
	NOAEC (inhalation, rat, dust/mist/fume, 90 days)	≤ 25 mg/l air OECD 412

Aspiration hazard : Not classified

#### Coolant -38°C G11 Ready to Use

Viscosity, kinematic	21 mm²/s @ 20°C
Other information :	Having regard to the physical, chemical and toxicological properties of the ingredients. For
	further information see section 4.

## **SECTION 12: Ecological information**

12.1. Toxicity

General : According to the criteria of the EC-classification and labelling "dangerous for the environment" (93/21/EEC) the material/product is not to be classified as dangerous to the environment

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Hazardous to the aquatic environment, short-term

: Not classified

Hazardous to the aquatic environment, long-term

(chronic)

: Not classified

1,2-ethanediol (107-21-1)	
LC50 fish 1	72860 mg/l @ 96h ( Pimephales promelas)
EC50 Daphnia 1	> 100 mg/l @ 48h (EOCD Guideline 202, Daphnia magna)
EC50 96h - Algae [2]	6500 – 13000 mg/l @ Pseudokirchneriella subcapitata
NOEC chronic fish	15380 mg/l @ 7d, Pimephales promelas
NOEC chronic crustacea	8590 mg/l @ Ceriodaphnia dubia

Sodium benzoate (532-32-1)	
LC50 fish 1	484 mg/l Pimephales promelas
EC50 72h - Algae [1]	> 30,5 mg/l Pseudokirchneriella subcapitata
NOEC chronic fish	10 mg/l Danio rerio @144h
12.2. Persistence and degradability	
1,2-ethanediol (107-21-1)	
Biodegradation	Readily biodegradable
12.3. Bioaccumulative potential	
1,2-ethanediol (107-21-1)	
Log Pow	-1,36
Bioaccumulative potential	There is no bioaccumulation.
12.4. Mobility in soil	
Coolant -38°C G11 Ready to Use	
Soil	Avoid release to the environment.

1,2-ethanediol	(107-21-1)

Soil This material has low volatility and is water soluble hence the potential for mobility is high.

## 12.5. Results of PBT and vPvB assessment

No additional information available.

#### 12.6. Other adverse effects

No additional information available.

## **SECTION 13: Disposal considerations**

13.1. Waste treatment methods

Regional legislation (waste) : Disposal must be done according to official regulations.

Product/Packaging disposal recommendations

: Dispose of contents/container in accordance with licensed collector's sorting instructions.

Waste materials

: Waste disposal according to official state regulations.

European List of Waste (LoW) code : 16 01 14\* - antifreeze fluids containing dangerous substances

## **SECTION 14: Transport information**

In accordance with ADR / IMDG

ADR	IMDG	
14.1. UN number		
Not applicable	Not applicable	
14.2. UN proper shipping name		
Not applicable	Not applicable	
14.3. Transport hazard class(es)		
Not applicable	Not applicable	
14.4. Packing group		
Not applicable	Not applicable	

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14.5. Environmental hazards	
Dangerous for the environment : No	Dangerous for the environment : No Marine pollutant : No
No supplementary information available	

#### 14.6. Special precautions for user

#### **Overland transport**

No data available

## Transport by sea

No data available

## 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

Contains no substance subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals.

Contains no substance subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

#### 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:	
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Repr. 2	Reproductive toxicity, Category 2
STOT RE 2	Specific target organ toxicity – Repeated exposure, Category 2
H302	Harmful if swallowed.
H319	Causes serious eye irritation.
H361	Suspected of damaging fertility or the unborn child.
H373	May cause damage to organs through prolonged or repeated exposure.

#### 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.