

Use

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878 Issue date: 31-1-2020 Revision date: 25-11-2020 Supersedes: 13-11-2020 version: 3.3

	dentification of the surbot			
	dentification of the subst	ance/mixture and of the	company/undertaking	
1.1. Product identifier Product form		: Mixture		
Product name		: Coolant Premium Longlife	-40°C G12++ Ready to Use	
UFI		: 39DF-QQYD-928D-XFYV	40 0 012 · 1 (ddy to 000	
Product code		: 87000C		
Type of product				
51 1		: Anti-freezing agents		
Product group		: Mixture	I To a la contra de	
1.2. Relevant id	lentified uses of the substa	nce or mixture and uses a	dvised against	
1.2.1. Relevant id	lentified uses			
Main use category	/	: Professional use		
Function or use ca	ategory	: Anti-freezing agents		
1.2.2. Uses advis	ed against			
No additional infor	•			
1.3. Details of t	he supplier of the safety da	ta sheet		
MPM International				
Cyclotronweg 1				
2629 HN Delft Del T +31 (0)15 2514(				
	nl - www.mpmoil.com			
1.4. Emergency	/ telephone number			
Emergency number		: +31 (0)15 2514030 (08.00 - 1	7.00 GMT+1)	
Country	Official advisory body	Address	Emergency number	Comment
reland	National Poisons Information	PO Box 1297	+353 1 809 2566 (Healthcare	
	Centre	Beaumont Road	professionals-24/7)	
	Beaumont Hospital	9 Dublin	+353 1 809 2166 (public, 8am	
			- 10pm, 7/7)	
United Kingdom	Guy's & St Thomas' Poisons	Avonley Road	+44 20 7188 7188	
	Unit Medical Toxicology Unit,	SE14 5ER London		
	Guy's & St Thomas' Hospital			
	Truct			

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
Reproductive toxicity, Category 2	H361d
Specific target organ toxicity — Repeated exposure, Category 2	H373
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)

Trust



CLP Signal word Hazardous ingredients : Warning

: ethanediol; ethylene glycol

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

Hazard statements (CLP)	: H302 - Harmful if swallowed. H361d - Suspected of damaging the unborn child. H373 - May cause damage to organs (kidneys) through prolonged or repeated exposure (Dermal, inhalation, oral).
Precautionary statements (CLP)	<ul> <li>P102 - Keep out of reach of children.</li> <li>P260 - Do not breathe dusts or mists.</li> <li>P280 - Wear eye protection, face shield, protective gloves.</li> <li>P101 - If medical advice is needed, have product container or label at hand.</li> <li>P301+P310 - IF SWALLOWED: Immediately call a doctor, a POISON CENTER.</li> <li>P405 - Store locked up.</li> <li>P501 - Dispose of Contents and container to an approved waste disposal plant.</li> </ul>
2.3. Other hazards	

No additional information available

SECTION 3: Composition/information 3.1. Substances Not applicable 3.2. Mixtures	on ingredients		
Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
ethanediol; ethylene glycol	(CAS-No.) 107-21-1 (EC-No.) 203-473-3 (EC Index-No.) 603-027-00-1 (REACH-no) 01-2119456816-28	≥ 30 – ≤ 50	Acute Tox. 4 (Oral), H302 STOT RE 2, H373
Sodium-2-ethylhexanoaat	(CAS-No.) 19766-89-3 (EC-No.) 243-283-8	≥ 1 – ≤ 2,5	Repr. 2, H361d

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

SECTION 4: First aid measures	
4.1. Description of first aid measures	
General	: In all cases of doubt, or when symptoms persist, seek medical attention. If you feel unwell, seek medical advice (show the label where possible).
After inhalation	: Remove to fresh air and keep at rest in a position comfortable for breathing. If unconscious, place in the recovery position and seek medical advice.
After skin contact	: Gently wash with plenty of soap and water. If skin irritation 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	: Rinse mouth out with water. Entering the lungs by ingestion or vomiting may cause severe lung damage. Do NOT induce vomiting. Get medical advice/attention if you feel unwell.
4.2. Most important symptoms and effects	, both acute and delayed
Symptoms/effects	: Ethylene glycol is harmful if swallowed. Symptoms may be delayed. Can include nausea, vomiting, cramps, can affect the level of consciousness . Can give damage to kidney Convulsions. Symptoms of ingestion include drowsiness, weakness, headache, dizziness, nausea, vomiting. Pulmonary oedema.

4.3. Indication of any immediate medical attention and special treatment needed Treat symptomatically.

SECTION 5: Firefighting measures	
5.1. Extinguishing media	
Suitable extinguishing media	: Dry chemical, CO2, dry sand, or alcohol-resistant foam.
Unsuitable extinguishing media	: None known. Do not use a heavy water stream.
5.2. Special hazards arising from the sub	stance or mixture
Explosion hazard	: Heat from a fire could result in drum bursting.
5.3. Advice for firefighters	
Precautionary measures fire	: Do not enter fire area without proper protective equipment, including respiratory protection.
Protection during firefighting	: Self-contained breathing apparatus with an air line.
Other information	<ul> <li>Exercise caution when fighting any chemical fire. Do not enter fire area without proper protective equipment, including respiratory protection.</li> </ul>

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

SECTION 6: Accidental release measur	'es
6.1. Personal precautions, protective equip	ment and emergency procedures
General measures	: Stop leak if safe to do so. Do not breathe dusts or mists. Ensure adequate ventilation, especially in confined areas.
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.
6.2. Environmental precautions	
Avoid release to the environment. Notify authorities	if liquid enters sewers or public waters.
6.3. Methods and material for containment a	and cleaning up
For containment	: Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.

### 6.4. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection". For further information refer to section 13. Information on safe handling - see Section 7.

SECTION 7: Handling and storage	
7.1. Precautions for safe handling	
Additional hazards when processed	: Read carefully and follow all instructions.
Precautions for safe handling	: Avoid contact with skin and eyes. Ensure good ventilation of the work station.
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 a	ny incompatibilities
Technical measures	: Store locked up. Provide local exhaust or general room ventilation. Keep away from sources of ignition - No smoking.
Incompatible products	: Strong acids.
Information on mixed storage	: Keep in a cool, well-ventilated place away from acids.
Storage area	: Keep in a cool, well-ventilated place. Store in a closed container. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
7.3 Specific and use(s)	

7.3. Specific end use(s)

Anti-freezing agents.

SECTION 8: Exposure 8.1. Control parameters	e controls/personal protection	
ethanediol; ethylene glycol (107-21-1)		
EU	IOELV TWA (mg/m <sup>3</sup> )	52 mg/m³
EU	IOELV TWA (ppm)	20 ppm
EU	IOELV STEL (mg/m <sup>3</sup> )	104 mg/m <sup>3</sup>
EU	IOELV STEL (ppm)	40 ppm
EU	Notes	Skin
EU	Regulatory reference	Commission Directive 2000/39/EC
Germany	Notes	
Ireland	Local name	Ethane-1,2-diol [Ethylene glycol]
Ireland	OEL (8 hours ref) (mg/m³)	10 mg/m³ particulate 52 mg/m³ vapour
Ireland	OEL (8 hours ref) (ppm)	20 ppm vapour
Ireland	OEL (15 min ref) (mg/m3)	104 mg/m³ vapour
Ireland	OEL (15 min ref) (ppm)	40 ppm vapour
Ireland	Notes (IE)	Sk (Substances which have the capacity to penetrate intact skin when they come in contact with it, and be absorbed into the body), IOELV (Indicative Occupational Exposure Limit Values)
Ireland	Regulatory reference	Chemical Agents Code of Practice 2020
United Kingdom	Local name	Ethane-1,2-diol

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

ethanediol; ethylene glycol (107-21-1)		
United Kingdom	WEL TWA (mg/m³)	10 mg/m³ particulate 52 mg/m³ vapour
United Kingdom	WEL TWA (ppm)	20 ppm vapour
United Kingdom	WEL STEL (mg/m <sup>3</sup> )	104 mg/m³ vapour
United Kingdom	WEL STEL (OEL STEL) [ppm]	40 ppm vapour
United Kingdom	Remark (WEL)	Sk (Can be absorbed through the skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity)
United Kingdom	Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE
8.2. Exposure contro	ls	

### Technical measures:

Ensure that there is a suitable ventilation system.

#### Personal protective equipment:

Gloves. Safety glasses.

#### Materials for protective clothing:

Wear suitable protective clothing, gloves and eye/face protection

#### Hand protection:

Wear suitable gloves resistant to chemical penetration

#### Eye protection:

Safety goggles

#### Skin and body protection:

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

#### **Respiratory protection:**

In case of inadequate ventilation wear respiratory protection.

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



#### Other information:

Do not eat, drink or smoke when using this product. Always wash hands after handling the product. Avoid inhalation of vapours.

SECTION 9: Physical and chemical properties		
9.1. Information on basic physical and chen		
Physical state	: Liquid	
Appearance	: Clear.	
Colour	: Red.	
Odour	: slight.	
Odour threshold	: No data available	
pH	: 7,5 – 8,5	
Relative evaporation rate (butylacetate=1)	: No data available	
Melting point	: -12 °C	
Freezing point	: No data available	
Boiling point	: > 170 °C 760 mm Hg	
Flash point	: 122 °C CC (closed cup)	
Auto-ignition temperature	: 400 °C	
Decomposition temperature	: No data available	
Flammability (solid, gas)	: No data available	
Vapour pressure	: 0,12 mm Hg 20°C	
Relative vapour density at 20 °C	: No data available	

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

Relative density	: No data available
Density	: 1062 g/l 20°C
Solubility	: Acetone. alcohols. water.
Log Pow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available
9.2. Other information	
Miscibility	: water,acetone,alcohol

SECTION 10: Stability and reactivity
10.1. Reactivity
No additional information available
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
Moisture. No naked flames, sparks, and do not smoke.
10.5. Incompatible materials
Strong acids. Oxidizing agent.
10.6. Hazardous decomposition products

When exposed to high temperatures may produce hazardous decomposition products such as carbon monoxide and dioxide, smoke, nitrogen oxides (NOx), sulphur compounds.

<b>SECTION 11: Toxicological information</b>	
11.1. Information on toxicological effects	
Acute toxicity (oral)	: Harmful if swallowed.
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified
ATE CLP (oral)	1020,408 mg/kg bodyweight

ethanediol; ethylene glycol (107-21-1)	
LD50 oral rat	7712 mg/kg bodyweight
LD50 dermal rat	> 3500 mg/kg Mouse
LD50 dermal rabbit	10600 mg/kg
LC50 Inhalation - Rat	> 2,5 mg/l/6Hrs

Sodium-2-ethylhexanoaat (19766-89-3)		
LD50 oral rat	2043 mg/kg bodyweight OECD 401	
LD50 dermal rat	> 2000 mg/kg bodyweight OECD 402	
Skin corrosion/irritation	: Not classified	
	pH: 7,5 – 8,5	
Serious eye damage/irritation	: Not classified	
	pH: 7,5 – 8,5	
Respiratory or skin sensitisation	: Not classified	
Germ cell mutagenicity	: Not classified	
Carcinogenicity	: Not classified	
ethanediol; ethylene glycol (107-21-1)		
NOAEL (chronic, oral, animal/male, 2 years)	1000 mg/kg bodyweight	
NOAEL (chronic, oral, animal/female, 2 years)	1500 mg/kg bodyweight	
Reproductive toxicity	: Suspected of damaging the unborn child.	
STOT-single exposure	: Not classified	
25-11-2020 (version: 3.3)	EN (English)	5/8

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

according to Regulation (EC) No. 1907/2006 (REACH) v	vith its amendment Regulation (EU) 2020/878
STOT-repeated exposure	: May cause damage to organs (kidneys) through prolonged or repeated exposure (Dermal, inhalation, oral).
ethanediol; ethylene glycol (107-21-1)	
NOAEL (oral, rat, 90 days)	200 mg/kg bodyweight/day
Sedium 2 ethylheveneset (40766 90 2)	
Sodium-2-ethylhexanoaat (19766-89-3)	
NOAEL (oral, rat, 90 days)	≈ 300 mg/kg bodyweight EPA OTS 795.2600
Aspiration hazard	: Not classified
Potential adverse human health effects and symptoms	<ul> <li>This product contains ethylene glycol (EG). The toxicity of EG via inhalation or skin contact is expected to be slight at room temperature. The estimated oral lethal dose is about 100 cc (3.3 oz.) for an adult human. Ethylene glycol is oxidized to oxalic acid which results in the deposition of calcium oxalate crystals mainly in the brain and kidneys. Early signs and symptoms of EG poisoning may resemble those of alcohol intoxication. Later, the victim may experience nausea, vomiting, weakness, abdominal and muscle pain, difficulty in breathing and decreased urine output. When EG was heated above the boiling point of water, vapors formed which reportedly caused unconsciousness, increased lymphocyte count, and a rapid, jerky movement of the eyes in persons chronically exposed. When EG was administered orally to pregnant rats and mice, there was an increase in fetal deaths and birth defects. Some of these effects occurred at doses that had no toxic effects on the mothers. We are not aware of any reports that EG causes reproductive toxicity in human beings.</li> <li>2-Ethylhexanoic acid (2-EXA) caused an increase in liver size and enzyme levels when repeatedly administered to rats via the diet. When administered to pregnant rats by gavage or in drinking water, 2-EXA caused teratogenicity (birth defects) and delayed postnatal development of the pups. Additionally, 2-EXA impaired female fertility in rats. Birth defects were seen in the offspring of mice who were administered sodium 2-ethylhexanoate via intraperitoneal injection during pregnancy.</li> </ul>
Other information	: Contains small amount Bitrex. Bitterant agent is a general description for chemical additives that are added to hazardous products to give it a bitter taste, which creates a strong aversion and as such avoids accidental poisonings for especially young children and household pets. It is often used in household cleaners, pesticides and also engine coolants. There are a number of possible chemicals that can be used, however, most commonly known is the Denatonium benzoate (CAS 3734-33-6.).
<b>SECTION 12: Ecological information</b>	
12.1. Toxicity	
Conoral	· According to the criteria of the EC classification and labelling "dangerous for the

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.
Hazardous to the aquatic environment, short-term : (acute)	Not classified
Hazardous to the aquatic environment, long-term : (chronic)	Not classified
ethanediol; ethylene glycol (107-21-1)	
LC50 fish 1	72860 mg/l 96 hrs / Pimephales promelas
EC50 Daphnia 1	> 100 mg/l 48 hrs
EC50 other aquatic organisms 2	> 9600 mg/l 96 hrs / Selenastrum capricornutum
EC50 96h - Algae [1]	3536 mg/l grenn algae
EC50 96h - Algae [2]	6500 – 13000 mg/l Pseudokirchneriella subcapitata
NOEC (chronic)	15380 mg/l Fish Early Life Stage / Pimephales promelas / 7 days

Sodium-2-ethylhexanoaat (19766-89-3)	
LC50 fish 1	> 100 mg/l Oryzias latipes
EC50 Daphnia 1	910 mg/l Daphnia magna
EC50 72h - Algae [1]	49,3 mg/l Desmodesmus subspicatus
LOEC (chronic)	63 mg/l Daphnia magna @21d
NOEC (chronic)	25 mg/l Daphnia magna @21d

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

12.2. Persistence and degradability	
ethanediol; ethylene glycol (107-21-1)	
Biodegradation	Readily biodegradable
12.3. Bioaccumulative potential	
ethanediol; ethylene glycol (107-21-1)	
Log Pow	-1,36
Bioaccumulative potential	There is no bioaccumulation.
12.4. Mobility in soil	
Coolant Premium Longlife -40°C G12++ Ready to Use	
Soil	Avoid release to the environment.

ethanediol; ethylene glycol (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.
Waste disposal recommendations	: Dispose as hazardous waste.
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	14.2. UN proper shipping name		
Not applicable	Not applicable		
14.3. Transport hazard o	lass(es)		
Not applicable	Not applicable		
14.4. Packing group			
Not applicable	Not applicable		
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

### Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

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
Repr. 2	Reproductive toxicity, Category 2
STOT RE 2	Specific target organ toxicity — Repeated exposure, Category 2
H302	Harmful if swallowed.
H361d	Suspected of damaging 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.