



Antifreeze Premium Longlife G13 Concentrate

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830
Issue date: 2-2-2012 Revision date: 25-11-2020 Supersedes: 30-10-2020 version: 2.4

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

1.1. Product identifier

Product form : Mixture
Trade name : Antifreeze Premium Longlife G13 Concentrate
UFI : DX6J-PRD2-828W-C2DV
Product code : 87000AVAG

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
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 - F +31 (0)15 2514031
msds@mpmoil.nl - www.mpmoil.nl

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 | Beaumont Hospital Beaumont Road 9 Dublin | : +353 1 8379964 | |
| 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]

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) :



GHS08

CLP Signal word : Warning
Hazardous ingredients : 1,2-Ethanediol
Hazard statements (CLP) : H361d - Suspected of damaging the unborn child.
H373 - May cause damage to organs (kidneys) through prolonged or repeated exposure (oral).
Precautionary statements (CLP) : P260 - Do not breathe dusts or mists.
P280 - Wear protective gloves, protective clothing, eye protection, face protection.
P301+P310 - IF SWALLOWED: Immediately call a doctor, a POISON CENTER.
P501 - Dispose of contents and container to an approved waste disposal plant.

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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] |
|-------------------------|--|---------|---|
| 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 | 34 – 80 | Acute Tox. 4 (Oral), H302 STOT RE 2, H373 |
| GLYCERIN | (CAS-No.) 56-81-5 (EC-No.) 200-289-5 | 10 – 30 | Not classified |
| Sodium-2-ethylhexanoaat | (CAS-No.) 19766-89-3 (EC-No.) 243-283-8 | 1 – 5 | Repr. 2, H361d |

Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

| | |
|--------------------|---|
| After inhalation | : If unconscious, place in the recovery position and seek medical advice. 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 opthalmologist if irritation persists. |
| After ingestion | : If the person is fully conscious, make him/her drink plenty of water. Never give an unconscious person anything to drink. Do NOT induce vomiting. Get immediate medical advice/attention. |

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. |
|------------------|--|

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. |

5.2. Special hazards arising from the substance 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 | : Exercise caution when fighting any chemical fire. Do not enter fire area without proper protective equipment, including respiratory protection. 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 | : Stop leak if safe to do so. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not breathe dusts or mists. Ventilate well. |
|------------------|---|

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.

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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.

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

- Precautions for safe handling : Avoid all eye and skin contact and do not breathe vapour and mist. Provide local exhaust or general room ventilation. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- 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 : Provide local exhaust or general room ventilation. Keep away from sources of ignition - No smoking. Store in a well-ventilated place. 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 : Store in a well-ventilated place. Keep in a cool, well-ventilated place. Keep away from food, drink and animal feedingstuffs. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

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

| | | |
|----------------|---|--|
| EU | Local name | Etilen glikol |
| EU | IOELV TWA (mg/m ³) | 52 mg/m ³ |
| EU | IOELV TWA (ppm) | 20 ppm |
| EU | IOELV STEL (mg/m ³) | 104 mg/m ³ |
| EU | IOELV STEL (ppm) | 40 ppm |
| EU | Notes | Skin |
| EU | Regulatory reference | Commission Directive 2000/39/EC |
| Germany | TRGS 910 Acceptable concentration notes | |
| Ireland | Local name | Ethane-1,2-diol [Ethylene glycol] |
| Ireland | OEL (8 hours ref) (mg/m ³) | 10 mg/m ³ particulate 52 mg/m ³ vapour |
| Ireland | OEL (8 hours ref) (ppm) | 20 ppm vapour |
| Ireland | OEL (15 min ref) (mg/m ³) | 104 mg/m ³ 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 |
| United Kingdom | WEL TWA (mg/m ³) | 10 mg/m ³ particulate 52 mg/m ³ vapour |
| United Kingdom | WEL TWA (ppm) | 20 ppm vapour |
| United Kingdom | WEL STEL (mg/m ³) | 104 mg/m ³ vapour |
| United Kingdom | WEL STEL (OEL STEL) [ppm] | 40 ppm vapour |

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

| | | |
|----------------|----------------------|---|
| 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 |

GLYCERIN (56-81-5)

| | | |
|----------------|---|---------------------------------------|
| EU | IOELV TWA (mg/m ³) | 10 mg/m ³ |
| Germany | TRGS 910 Acceptable concentration notes | |
| United Kingdom | Local name | Glycerol |
| United Kingdom | WEL TWA (mg/m ³) | 10 mg/m ³ mist |
| United Kingdom | Regulatory reference | EH40/2005 (Fourth edition, 2020). HSE |

8.2. Exposure controls

Technical measures:

Ensure good ventilation of the work station. Ensure adequate ventilation, especially in confined areas.

Materials for protective clothing:

Wear suitable protective clothing, gloves and eye/face protection

Hand protection:

Wear suitable gloves resistant to chemical penetration

| Type | Material | Permeation | Thickness (mm) | Penetration | Standard |
|------|------------------------|-------------------|----------------|-------------|----------|
| | Neoprene rubber (HNBR) | 6 (> 480 minutes) | >0,35 | | |

Eye protection:

Safety goggles

Skin and body protection:

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

Respiratory protection:

No special respiratory protection equipment is recommended under normal conditions of use with adequate ventilation. [In case of inadequate ventilation] wear respiratory protection.

Other information:

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

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

| | |
|--|---------------------|
| Physical state | : Liquid |
| Appearance | : Hygroscopic. |
| Colour | : red. |
| Odour | : slight. |
| Odour threshold | : No data available |
| pH | : 8,6 |
| Relative evaporation rate (butylacetate=1) | : No data available |
| Melting point | : No data available |
| Freezing point | : No data available |
| Boiling point | : 178 °C 760 mm Hg |
| Flash point | : No data available |
| Auto-ignition temperature | : No data available |
| Decomposition temperature | : No data available |
| Flammability (solid, gas) | : No data available |
| Vapour pressure | : No data available |
| Relative vapour density at 20 °C | : No data available |
| Relative density | : No data available |

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| | |
|----------------------|-----------------------------|
| Density | : 1140 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

None under normal conditions.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

| | |
|-----------------------------|------------------|
| Acute toxicity (oral) | : Not classified |
| Acute toxicity (dermal) | : Not classified |
| Acute toxicity (inhalation) | : Not classified |

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

| | |
|-----------------------|--------------------|
| LD50 oral rat | 7712 mg/kg |
| LD50 dermal rat | > 3500 mg/kg Mouse |
| LD50 dermal rabbit | 10600 mg/kg |
| LC50 Inhalation - Rat | > 2,5 mg/l/6Hrs |

GLYCERIN (56-81-5)

| | |
|---------------|---------------------|
| LD50 oral rat | 27 mg/kg bodyweight |
|---------------|---------------------|

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: 8,6 |
| Serious eye damage/irritation | : Not classified pH: 8,6 |
| Respiratory or skin sensitisation | : Not classified |
| Germ cell mutagenicity | : Not classified |
| Carcinogenicity | : Not classified |

1,2-Ethandiol (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 |

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

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

NOAEL (oral, rat, 90 days) 200 mg/kg bodyweight/day

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 : 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.
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.

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.).

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.

Hazardous to the aquatic environment, short-term (acute) : Not classified

Hazardous to the aquatic environment, long-term (chronic) : Not classified

1,2-Ethanediol (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 |

GLYCERIN (56-81-5)

LC50 fish 1 54000 mg/l Oncorhynchus mykiss

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 |

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| | |
|----------------|----------------------------|
| LOEC (chronic) | 63 mg/l Daphnia magna @21d |
| NOEC (chronic) | 25 mg/l Daphnia magna @21d |

12.2. Persistence and degradability

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

| | |
|----------------|-----------------------|
| Biodegradation | Readily biodegradable |
|----------------|-----------------------|

12.3. Bioaccumulative potential

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

| | |
|---------------------------|------------------------------|
| Bioaccumulative potential | There is no bioaccumulation. |
|---------------------------|------------------------------|

12.4. Mobility in soil

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| | |
|------|-----------------------------------|
| 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. |
| 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 / RID / IMDG / IATA / ADN

| 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 |
| 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

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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 |
| 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.