Antifreeze Premix -35°C

Safety Data Sheet

According to REACH Regulation (EC) No 1907/2006, as retained and amended in UK law.
Product Reference code:S1637756380
Issue date: 7/10/2024 Version: 1.00

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

1.1. Product identifier

Product form	:	Mixture
Product name	:	Antifreeze Premix -35°C
Product code	:	S1637756380
Synonyms	:	Kühlerfrostschutz Premix -35°C / Liquide de refroidissement Prêt à emploi -35°C / Antifreeze Premix -35°C
Product group	:	Antifreezes

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
Use of the substance/mixture	:	Use in automotive applications Anti-freezing agents

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of product safety information sheet

Name	Stellantis Auto SAS
	2-10 bd de l'Europe
	78300 Poissy
Inquiry office	
	IFZ Ingenieurbüro und Consulting GmbH
E-mail	OPEL-helpdesk@ifz-berlin.de
Telephone:	+49 30 / 2904897-10

1.4. Emergency telephone number

Emergency number	+49 61 31 19240 United Kingdom +44 870 600 626 / 0870 600 6266

Further information
Apply safety data sheet to the following products:

Part-No.	Catalogue-No.	amount
1637756380	-	2 L
1637756480	-	5 L
1637756680	-	20 L
1637756780	-	210 L
1637756880 (DFS)	-	2 L
1637756980 (DFS)	-	6 L
1637757180 (DFS)	-	20 L
1606382880 (DFS)	-	210 L

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to GB CLP (SI 2019:720 as amended)

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

2.2. Label elements

Labelling according to GB CLP (SI 2019:720 as amended)

Hazard pictograms (GB CLP) :

GHS07 GHS08

Signal word (GB CLP) : Warning

Contains : ethanediol; ethylene glycol

Hazard statements (GB CLP) : H302 - Harmful if swallowed.
H373 - May cause damage to organs (kidneys) through prolonged or repeated exposure.

Precautionary statements (GB CLP) : P260 - Do not breathe dust, fume, gas, mist, vapours or spray.
P264 - Wash hands, forearms and face thoroughly after handling.
P301+P330+P331+P310 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor.
P501 - Dispose of contents and container to a hazardous or special waste collection point, in accordance with local, regional, national and international regulations.

2.3. Other hazards

Other hazards which do not result in classification : At high temperatures, vapours can form in concentrations which can be hazardous to health.

Contains no PBT and/or vPvB substances ≥ 0.1% assessed in accordance with UK REACH Annex XIII

Component	
ethanediol; ethylene glycol (107-21-1)	The product does not meet the PBT and vPvB classification criteria

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of UK 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 GB BPR and GB PPP 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	%	Labelling according to GB CLP (SI 2019:720 as amended)
ethanediol; ethylene glycol	CAS-No.: 107-21-1 EC-No.: 203-473-3	40 – 60	Acute Tox. 4 (Oral), H302 (ATE=500 mg/kg bodyweight) Acute Tox. Not classified (Inhalation:vapour) STOT RE 2, H373

Comments : Contains bitters

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

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : If you feel unwell, seek medical advice (show the label where possible). Show this safety data sheet to the doctor in attendance. Do not administer liquids to the unconscious person and avoid vomiting. If unconscious, place the person in the recovery position and seek medical advice immediately. Protection is needed for the First Aider. Use personal protective equipment. (Protective gloves, chemical-resistant; Safety glasses, respirator mask). Eye wash fountains and safety showers must be easily accessible.

First-aid measures after inhalation : Move the affected person away from the contaminated area and into the fresh air. Lay the affected person down, and keep her or him warm and calm. Call a physician immediately. In case of irregular breathing or respiratory arrest: Give oxygen or artificial respiration if necessary.

First-aid measures after skin contact : Remove contaminated clothing and shoes. Wash skin with soap and water. Seek medical attention if irritation develops. Wash contaminated clothing before reuse.

First-aid measures after eye contact : Rinse immediately and thoroughly, pulling the eyelids well away from the eye (15 minutes minimum). Remove contact lenses after the first 1 - 2 minutes and continue flushing. Consult an ophtalmologist if irritation persists.

First-aid measures after ingestion : If swallowed, seek medical advice immediately and show this container or label. Do not induce vomiting. If victim is conscious: Rinse mouth. Never give anything by mouth to an unconscious person. The same applies if the patient suffers cramps. If swallowed or in the event of vomiting, risk of product entering the lungs. In the event of spontaneous nausea and unconsciousness, keep the head back and bring the patient into the recovery position.

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

Symptoms/effects : May cause damage to organs through prolonged or repeated exposure.

Symptoms/effects after inhalation	:	Inhalation of vapours in high concentration may cause irritation of respiratory tract. Irritation of mucous membranes. Cough. Depression of the central nervous system, headaches, dizziness, drowsiness, loss of coordination.
Symptoms/effects after skin contact	:	Prolonged skin contact can lead to defatting of the skin or to irritation. May cause: Skin rash/inflammation, itching.
Symptoms/effects after eye contact	:	May cause slight irritation. May cause: Redness, pain.
Symptoms/effects after ingestion	:	Harmful if swallowed. Ethanediol (CAS 107-21-1): Toxic if swallowed. Ingestion may cause nausea and vomiting. Effects due to ingestion may include: Cramps, diarrhoea, thirst, weakness. Accelerated heart action. Coordination and equilibrium disorders can occur. May cause: Slurred speech, respiratory difficulties, blurred vision. If swallowed there is a risk of blindness. Decreased renal function. Circulatory collapse. Nervous system disorders. Symptoms may be delayed. Aspiration of the liquid while swallowing incorrectly or vomiting can lead to serious pneumonia caused by chemicals. Liver and kidney injuries.
Chronic symptoms	:	Repeated excessive exposure can adversely affect an existing kidney disease.

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

Symptomatic treatment (decontamination and vital functions). Symptoms of poisoning may not appear for several hours. Keep under medical supervision for at least 48 hours. Victim to lie down in the recovery position, cover and keep him warm. After swallowing: Possible administration of ethanol. Ethylene glycol is metabolized to oxalic acid. Symptoms of poisoning can be delayed by administering ethanol (in the form of a 5% solution in a physiological salt solution, to maintain a blood level of 1 - 2 mg/ml). This treatment is only effective when it is begun within 6 hours after exposure. In the case of emergency the effect of the simultaneously administered dosis of ethandiol and ethanol must be checked according to each individual case. Call a physician or Poison Control Centre immediately.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	:	Carbon dioxide (CO_2), chemical fire extinguisher, sprayed water stream, alcohol-resistant foam.
Unsuitable extinguishing media	:	Do not use water jet.

5.2. Special hazards arising from the substance or mixture

Fire hazard	:	When heated or in the case of a fire, the formation of poisonous gases is possible.
Explosion hazard	:	On heating, there is a risk of bursting due to internal pressure build-up. Cool down the containers exposed to heat with a water spray.
Hazardous decomposition products in case of fire	:	Thermal decomposition generates : smoke, carbon oxides (CO, CO_2), organic compounds (low molecular weight). The inhalation of hazardous decomposition products may cause serious health damage.

5.3. Advice for firefighters

Precautionary measures fire	:	Exercise caution when fighting any chemical fire. Keep product and empty container away from heat and sources of ignition.
Firefighting instructions	:	Secure the danger area. Evacuate personnel to a safe area. Standard procedure for chemical fires. Reduce vapour with fog or fine water spray. Prevent fire fighting water from entering the environment.

Protection during firefighting	:	Do not enter fire area without proper protective equipment, including respiratory protection. In the event of fire, wear self-contained breathing apparatus. Complete protection suit and compressed air breathing apparatus. Clothing for firefighters which comply with the European norm EN 469 (including helmet, protective boots, protective gloves) provide a basic protection for accident with chemicals. Avoid contact with this material during fire fighting operations. If contact is likely, change to full chemical resistant fire fighting clothing with self-contained breathing apparatus.
Other information	:	The combustion gases are partially condensed with the water used to extinguish the fire and end up as a contaminant in this water. Collect contaminated fire fighting water separately. Contaminated extinguishing water and soil must be disposed of in accordance with official regulations.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures	:	Keep public away from danger area. Keep away from ignition sources (including static discharges). Ensure adequate ventilation, especially in confined areas. Do not breathe in vapours and mist. Higher exposure: Use personal protective equipment as required. Self-contained breathing apparatus. Handle in accordance with good industrial hygiene and safety practice. Equip cleanup crew with proper protection.

6.1.1. For non-emergency personnel

No additional information available

6.1.2. For emergency responders

No additional information available

6.2. Environmental precautions

Do not flush into surface water or sanitary sewer system. Do not allow material to contaminate ground water system. Contact the responsible authority immediately if the product ends up in the soil, a body of water, or the sewer system.

6.3. Methods and material for containment and cleaning up

For containment	:	Prevent further leakage or spillage if safe to do so. Dike for recovery or absorb with appropriate material.
Methods for cleaning up	:	If a major spill occurs, all personnel should be immediately evacuated and the area ventilated. Clean up any spills as soon as possible, using an absorbent material to collect it. Adsorption in inert material (e.g. sand, kieselguhr, acid binder, universal binder, sawdust). Keep in suitable, closed containers for disposal. Do not use unlabelled containers. Dispose of the material collected according to regulations. Wash contaminated area with large amounts of water. Dispose of rinse water in accordance with local and national regulations.
Other information	:	Even small quantities must be disposed of as per regulations.

6.4. Reference to other sections

See also section 7, 8. For disposal of residues refer to section 13 : Disposal considerations" ".

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed : Keep product and empty container away from heat and sources of ignition. Empty containers must be completely drained to the state of the art before being disposed of. Avoid emptying into the drains.

Precautions for safe handling : Ensure adequate ventilation, especially in confined areas. Do not breathe in vapours and mist. Wear personal protective equipment. Keep away from heat. Keep away from sparks and flames. Take notice of the directions of use on the label. Avoid prolonged and intensive skin contact. When handling the product, follow hygiene and safety precautions.

Hygiene measures : A high standard of personal hygiene is required. When using, do not eat, drink, or smoke. Keep away from food, drink and animal food stuffs. Avoid contact with skin, eyes and clothing. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Preventive skin protection by skin protection cream. (Protection cream can help to protect the skin surface. It should be applied before use.). Remove all contaminated clothes and shoes. Remove and wash contaminated clothing before re-use. Thoroughly clean shoes before re-using. Eye wash fountains and safety showers must be easily accessible.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Facilities must be planned in such a way that contamination of the soil and groundwater is excluded. Take precautionary measures against static discharge.

Storage conditions : Store in compliance with the local regulations. Store in original container. (watertight). Keep container tightly closed and dry. Keep in a cool, well-ventilated place. Protect from freezing. See information supplied by the manufacturer.

Heat and ignition sources : Keep away from open flames, hot surfaces and sources of ignition. Protect from heat and direct sunlight.

Information on mixed storage : Do not store together with edibles. Keep away from oxidizers, strong acids and strong bases.

Storage area : Smoking in the storage rooms is forbidden. When not in use, the product must be stored in its original transport packing. Keep container tightly closed. Store in compliance with the local regulations.

7.3. Specific end use(s)

No additional information available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

ethanediol; ethylene glycol (107-21-1)	
United Kingdom - Occupational Exposure Limits	
Local name	Ethane-1,2-diol
WEL TWA (OEL TWA)	10 mg/m³ particulate 52 mg/m³ vapour

ethanediol; ethylene glycol (107-21-1)	
	20 ppm vapour
WEL STEL (OEL STEL)	104 mg/m³ vapour
	40 ppm vapour
Remark	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)
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE

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

Antifreeze Premix -35°C	
DNEL/DMEL (Workers)	
Long-term - systemic effects, dermal	106 mg/kg bodyweight/day
Long-term - local effects, inhalation	35 mg/m³
DNEL/DMEL (General population)	
Long-term - systemic effects, dermal	53 mg/kg bodyweight/day
Long-term - local effects, inhalation	7 mg/m³
PNEC (Water)	
PNEC aqua (freshwater)	10 mg/l
PNEC aqua (marine water)	1 mg/l
PNEC aqua (intermittent, freshwater)	10 mg/l
PNEC aqua (intermittent, marine water)	10 mg/l
PNEC (Sediment)	
PNEC sediment (freshwater)	37 mg/kg dwt
PNEC sediment (marine water)	3.7 mg/kg dwt
PNEC (Soil)	
PNEC soil	1.53 mg/kg dwt
PNEC (STP)	
PNEC sewage treatment plant	199.5 mg/l

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:
Avoid all unnecessary exposure. Provide adequate ventilation and/or exaust ventilation. Follow the maximum workplace concentration values. If necessary: Local exhaust. When the concentration in the air is over the maximum occupational exposure limit, an approved respiratory protection apparatus must be worn. Electrical systems and equipment must comply with the regulations.

8.2.2. Personal protection equipment

Personal protective equipment - Report preview:
Personal protection equipment should comply with the relevant standards, be suitable for purpose, in good condition and maintained as specified.

Personal protective equipment symbol(s):

8.2.2.1. Eye and face protection

Eye protection - Report preview:
Wear eye protection. Safety glasses with side shields (EN 166)

8.2.2.2. Skin protection

Skin and body protection - Report preview:
Wear suitable protective clothing. After use: Wash contaminated skin areas thoroughly with soap and water.

Hand protection - Report preview:
Wear protective gloves. Chemically resistant protective gloves (according to European standard EN 374 or equivalent). Safety gloves should be selected for the actual conditions of use and in accordance with the instructions for use provided by the manufacturer. Please note that the daily use of a chemical glove in practice may be considerably shorter than the permeation time calculated in EN 374 as a result of many different factors (for example temperature). Use tested protective gloves. Protective gloves should be replaced immediately if damaged or in case of signs of wear.

Other skin protection

Materials for protective clothing - Report preview:
Personal protective equipment should be chosen according to the CEN standards and in discussion with the supplier of the protective equipment

8.2.2.3. Respiratory protection

Respiratory protection - Report preview:
In case of insufficient ventilation, wear suitable respiratory equipment. Breathing protection in the event of aerosol, mist or vapour formation. Respiratory protection measures are required when large amounts of the product are used, when the product is used in enclosed spaces or under any other circumstances, in which the explosion limit concentration is approached or even surpassed.

8.2.2.4. Thermal hazards

Thermal hazard protection:
None required for normal circumstances of use.

8.2.3. Environmental exposure controls

Environmental exposure controls:
Emission from ventilation and process equipment should be tested to make sure that it fulfils the requirements of environmental protection regulation.

Other information:
Do not flush into surface water or sanitary sewer system.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	:	Liquid
Colour	:	dark green.
Appearance	:	clear.
Odour	:	characteristic.
Odour threshold	:	Not available
Melting point	:	Not available
Freezing point	:	Not available
Boiling point	:	Not available
Flammability	:	Not available
Lower explosion limit	:	3.2 vol % (ethanediol; ethylene glycol)
Upper explosion limit	:	15.3 vol % (ethanediol; ethylene glycol)
Flash point	:	> 100 °C
Auto-ignition temperature	:	Not available
Decomposition temperature	:	Not available
pH	:	7 – 9
Viscosity, kinematic	:	Not available
Solubility	:	Not available
Partition coefficient n-octanol/water (Log Kow)	:	Not available
Vapour pressure	:	Not available
Vapour pressure at 50°C	:	Not available
Density	:	1.07 – 1.08 g/cm³ (at 20 °C)
Relative density	:	Not available
Relative vapour density at 20°C	:	Not available
Particle characteristics	:	Not applicable

ethanediol; ethylene glycol (107-21-1)	
Boiling point	197 °C
Flash point	111 °C
Auto-ignition temperature	398 °C
Vapour pressure	0.053 hPa
Vapour pressure at 50°C	1.1 hPa

9.2. Other information

9.2.1. Information with regard to physical hazard classes

No additional information available

9.2.2. Other safety characteristics

VOC content : 0 % VOC Directive 2010/75/EC

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under normal conditions.

10.2. Chemical stability

Stable at ambient temperature and under normal conditions of use.

10.3. Possibility of hazardous reactions

Reacts with (strong) oxidizers. e.g. chlorates, nitrates, peroxides.

10.4. Conditions to avoid

Protect from humid air. Keep away from heat and sources of ignition. Direct sunlight.

10.5. Incompatible materials

Avoid contact with strong oxidising agents.

10.6. Hazardous decomposition products

To avoid thermal decomposition, do not overheat. Ethylene glycol decomposes at 165 °C and releases among others glycolaldehyde, glyoxal, acetaldehyd, methan, formaldehyde, carbon monoxide and hydrogen. See also section 5.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Harmful if swallowed.
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

Antifreeze Premix -35°C	
ATE GB CLP (oral)	833.472 mg/kg bodyweight

ethanediol; ethylene glycol (107-21-1)	
LD50 oral rat	7712 mg/kg (male/female)
LD50 dermal rat	3500 mg/kg (male/female)
LC50 Inhalation - Rat	> 2.5 mg/l /6h - (male/female)
ATE GB CLP (oral)	500 mg/kg bodyweight
ATE GB CLP (dermal)	3500 mg/kg bodyweight

Skin corrosion/irritation : Not classified
pH: 7 – 9
Serious eye damage/irritation : Not classified
pH: 7 – 9
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)	1000 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.

ethanediol; ethylene glycol (107-21-1)	
NOAEL (subchronic, oral, animal/male, 90 days)	150 mg/kg bodyweight (OECD 408 method)
STOT-repeated exposure	May cause damage to organs (kidneys) through prolonged or repeated exposure.

Aspiration hazard : Not classified

ethanediol; ethylene glycol (107-21-1)	
Viscosity, kinematic	14.865 mm²/s

11.2. Information on other hazards

11.2.1. Endocrine disrupting properties

No additional information available

11.2.2. Other information

Potential adverse human health effects and symptoms : Swallowing can lead to lung oedema or pneumonia,Ethanediol (CAS 107-21-1): May impair fertility and cause harm to the unborn child,Effects on following organs are reported: heart, lungs,Liver and kidney damage may occur,Danger of blindness,Danger of metabolic acidosis,Inhalation of high vapour concentrations can cause CNS-depression and narcosis,Symptoms include headache, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness,LDlo (oral, human): approx. 100 ml,(Deadly dose)

Toxicokinetics, metabolism and distribution : Ethylene glycol is metabolized to oxalic acid.

Experience with humans : Inhalation of vapours in high concentration may cause irritation of respiratory tract,(cough),Concentration above the admissible concentration at the workplace may cause dizziness, headache and inebriation,Direct contact with the eyes is likely to be irritating,Drying out of the skin due to defatting,Repeated or prolonged exposure may cause skin irritation and dermatitis, due to degreasing properties of the product.

Other information : Chronic (long-term) health effects may result from repeated overexposure

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

ethanediol; ethylene glycol (107-21-1)	
LC50 - Fish [1]	72860 mg/l Pimephales promelas - (EPA 600/4-90/027)
EC50 - Crustacea [1]	> 100 mg/l Daphnia magna (Water flea) - (OECD 202 method)
EC50 72h - Algae [1]	6500 – 13000 mg/l Raphidocelis subcapitata - (EPA 600/9-78-018)
NOEC chronic fish	> 40 mg/l Menidia peninsulae - (ASTM E-47.01/3)
NOEC chronic crustacea	8590 mg/l Daphnia magna (Water flea) - (EPA 600/4-89/001)
NOEC chronic algae	> 100 mg/l Raphidocelis subcapitata - (OECD 201 method)

12.2. Persistence and degradability

Antifreeze Premix -35°C	
Persistence and degradability	Rapidly degradable

ethanediol; ethylene glycol (107-21-1)	
Persistence and degradability	Readily biodegradable.
Biodegradation	> 90 % (10 d) - (OECD 301A method)

12.3. Bioaccumulative potential

ethanediol; ethylene glycol (107-21-1)	
Partition coefficient n-octanol/water (Log Pow)	-1.36 (Quantitative structure-activity relationship (QSAR))
Bioaccumulative potential	Bioaccumulation is not expected to occur.

12.4. Mobility in soil

ethanediol; ethylene glycol (107-21-1)	
Ecology - soil	The substance will not evaporate into the atmosphere from the water surface. Predicted distribution to environmental compartments : water.

12.5. Results of PBT and vPvB assessment

Component	
ethanediol; ethylene glycol (107-21-1)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII. This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII.

12.6. Other adverse effects

No additional information available

12.7. Other adverse effects

Other adverse effects : None known.

Additional information : Do not allow material to contaminate ground water system. Do not flush into surface water or sanitary sewer system.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional waste regulation : Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements.

Sewage disposal recommendations : May not end up in waste water or open waters. Do not discharge into drains or the environment.

Product/Packaging disposal recommendations : Must not be disposed together with household garbage. Where possible recycling is preferred to disposal or incineration. If recycling is not possible, eliminate in accordance with local valid waste disposal regulations. Offer surplus and non-recyclable solutions to a licensed disposal company. Contact waste disposal services. The containers must be sealed, marked and disposed of safely. Packaging material: Disposal must be done according to official regulations. Dispose of non-cleansing packaging in the same way as the product. Emtied containers can contain residues of product. Do not use unlabelled containers. Do not re-use empty containers. Do not discharge the product into the environment.

Additional information : Waste code numbers are a recommendation, since the intended use by the consumer allows a final assignment.

European List of Waste (LoW, EC 2000/532) : 16 01 14* - antifreeze fluids containing dangerous substances
15 01 10* - packaging containing residues of or contaminated by dangerous substances

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

ADR	IMDG	IATA	ADN	RID
14.1. UN number				
Not regulated for transport				
not regulated	not regulated	not restricted	not regulated	not regulated
14.2. UN proper shipping name				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
Transport document description				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.3. Transport hazard class(es)				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.4. Packing group				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.5. Environmental hazards				
Dangerous for the environment : No	Dangerous for the environment : No Marine pollutant: No	Dangerous for the environment : No	Dangerous for the environment : No	Dangerous for the environment : No

ADR	IMDG	IATA	ADN	RID
No supplementary information available				

14.6. Special precautions for user

Overland transport
No data available

Transport by sea
No data available

Air transport
No data available

Inland waterway transport
No data available

Rail transport
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

Other information, restriction and prohibition regulations : Observe restrictions to employment for juvenils according to the 'juvenile work protection guideline' (94/33/EC). Employment prohibitions and restrictions according to § 11 and § 12 MuSchG have to be observed.

REACH Annex XVII (Restriction List)

EU restriction list (REACH Annex XVII)		
Reference code	**Applicable on**	**Entry title or description**
3(b)	Antifreeze Premix -35°C ; ethanediol; ethylene glycol	Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10

Seveso Directive (Disaster Risk Reduction)

Seveso Additional information : Not subject to 2012/18/EU (SEVESO III)

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 (1005/2009)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 1005/2009 on substances that deplete the ozone layer)

Dual-Use Regulation (428/2009)

Contains no substance subject to the COUNCIL REGULATION (EC) No 428/2009 of 5 May 2009 setting up a Community regime for the control of exports, transfer, brokering and transit of dual-use items.

VOC Directive (2004/42)

VOC content : 0 % VOC Directive 2010/75/EC

Explosives Precursors Regulation (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 (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)

15.1.2. United Kingdom

UK REACH Annex XIV (Authorisation List)

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

UK REACH Candidate List (SVHC)

Contains no substance(s) listed on the UK REACH Candidate List

15.2. Chemical safety assessment

No chemical safety assessment has been carried out for the substance or the mixture by the supplier.

SECTION 16: Other information

Abbreviations and acronyms:	
	ATE = Acute Toxicity Estimate
	DNEL = Derived No Effect Level
	PNEC = Predicted No-Effect Concentration
	NOEL = No Observed Effect Level
	NOEC = No-Observed-Effect-Concentration
	NOAEL = No Observed Adverse Effect Level
	LOAEL = Lowest Observed Adverse Effect Level
	SADT = Self-Accelerating decomposition temperature
	SVHC = substance of very high concern
	VOC = Volatile organic compounds
	IUCLID = International Uniform Chemical Information Database

Abbreviations and acronyms:	
	OECD = Organization for Economic Co-operation and Development
	RTECS = Registry of Toxic Effects of Chemical Substances
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	REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
	GHS = Globally Harmonized System of Classification and Labelling of Chemicals
	CLP = Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
	EINECS = European Inventory of Existing Commercial Chemical Substances
	ECHA = European Chemicals Agency

Full text of H- and EUH-statements:	
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
H302	Harmful if swallowed.
H373	May cause damage to organs through prolonged or repeated exposure.
STOT RE 2	Specific target organ toxicity – Repeated exposure, Category 2

Other information :

The information is based on present levels of our knowledge. It does not, however, give assurances of product properties and establishes no contract legal rights. The product is to be used exclusively for the applications named in the technical data sheet or in the processing instructions. Existing laws and regulations are the responsibility of the recipient of our products. The data of the hazardous ingredients were taken from the last relevant safety data sheet of the subcontractor.

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.