ANTIFREEZE/COOLANT POAT READY MIX (P)

SAFETY DATA SHEET

Compiled in accordance with REACH Regulation (EC) No 1907/2006, as retained and amended in UK law

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VERSION: 1.1

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

1.1. Product identifier

Product form	:	Mixture
Trade name	:	Antifreeze/Coolant POAT Ready Mix (P)
Product code	:	Ford Internal Ref.: 502503
SDS Number	:	8608
Product use	:	Public use

1.2. Relevant identified uses of the substance or mixture and uses advised against

1.2.1. Relevant identified uses

Function or use category	:	Antifreeze

1.2.2. Uses advised against

Restrictions on use	:	None known

1.3. Details of the supplier of the safety data sheet

Supplier
Ford-Werke GmbH
Edsel-Ford-Str. 2-14
50769 Cologne
Germany
+49 221 90-33333
sdseu@ford.com

Distributor
Ford Motor Company Ltd.
Parts Distribution Centre
Royal Oak Way South
NN11 8NT Daventry, Northants
United Kingdom
+44 1327 305 198

1.4. Emergency telephone number

+49 (0) 6132-84463 (GBK GmbH – 24/7)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to The Chemicals (Health and Safety) and Genetically Modified Organisms (Contained Use) (Amendment etc.) (EU Exit) Regulations

Health hazards	Specific target organ toxicity — Repeated exposure, Category 2	H373	May cause damage to organs (kidneys) through prolonged or repeated exposure (oral).

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 The Chemicals (Health and Safety) and Genetically Modified Organisms (Contained Use) (Amendment etc.) (EU Exit) Regulations

Hazard pictograms

Signal word Warning

Contains Ethanediol

Hazard statements

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

Precautionary statements

General

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

Prevention

P260 Do not breathe mist, spray, vapours, fume.

Response

P314 Get medical advice/attention if you feel unwell.

Disposal

P501 Dispose of contents and container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

2.3. Other hazards

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.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical name	CAS- No EC- No Index No RRN	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]	Notes
Ethanediol	107-21-1 203-473-3 603-027-00-1 01-2119456816-28-XXXX	34 -< 80	Acute Tox. 4 (Oral), H302 STOT RE 2, H373	#
Sodium 2-ethylhexanoate	19766-89-3 243-283-8	0,1 -< 3,0	Repr. 2, H361d	Listed in Annex IV / V REACH, exempted from registration.

Comments : #: substance with a Community workplace exposure limit
The product has a bitter taste for safety reasons, in case it is swallowed accidentally

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 : Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Never give anything by mouth to an unconscious person. If medical advice is needed, have product container or label at hand.

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms: Call a poison center or a doctor.

First-aid measures after skin contact : Wash skin with soap and water. If skin irritation occurs: Get medical advice/attention.

First-aid measures after eye contact : Remove contact lenses, if present and easy to do. Continue rinsing. Rinse immediately and thoroughly, pulling the eyelids well away from the eye (15 minutes minimum). Consult an ophtalmologist if irritation persists.

First-aid measures after ingestion : Rinse mouth out with water. Call a poison center or a doctor if you feel unwell. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.

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

Symptoms/effects after ingestion : Nausea. Convulsions. Dizziness. Vomiting. Abdominal pain.

Chronic symptoms : May cause damage to organs through prolonged or repeated exposure.

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 : Water spray. Dry powder. Foam. Carbon dioxide.

Unsuitable extinguishing media : Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire : During fire, gases hazardous to health may be formed. smokes. Carbon oxides (CO, CO2). Hydrocarbon substances with low molecular weight and their oxidation products.

5.3. Advice for firefighters

Firefighting instructions : Move containers from fire area if it can be done without personal risk.

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

Other information : Use standard firefighting procedures and consider the hazards of other involved materials.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Protective equipment : For further specification, refer to section 8 of the SDS.

Emergency procedures : Ventilate spillage area. Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Ensure adequate ventilation. Do not breathe vapours.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment. Avoid discharge into drains, water courses or onto the ground.

6.3. Methods and material for containment and cleaning up

For containment : Contain and dispose of waste according to local regulations.

Methods for cleaning up : Small spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. Large Spills: Stop leak if safe to do so. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. Never return spills in original containers for re-use. Flush residue with large amounts of water.

Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection". For disposal of residues refer to section 13 :" Disposal considerations".

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Wear personal protective equipment.

Hygiene measures : Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in a well-ventilated place. Keep cool.

Incompatible products : Keep away from open flames, hot surfaces and sources of ignition.

Incompatible materials : Strong oxidizing agents. Strong acids. Peroxides. Nitrates. Chlorates.

Special rules on packaging : Keep only in original container.

7.3. Specific end use(s)

Antifreeze.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1. National occupational exposure and biological limit values

Ethanediol (107-21-1)	
EU - Indicative Occupational Exposure Limit (IOEL)	
Local name	Ethylene glycol
IOEL TWA	52 mg/m³
IOEL TWA [ppm]	20 ppm
IOEL STEL	104 mg/m³
IOEL STEL [ppm]	40 ppm
Remark	Skin
Regulatory reference	COMMISSION DIRECTIVE 2000/39/EC
United Kingdom - Occupational Exposure Limits	
Local name	Ethane-1,2-diol
WEL TWA (OEL TWA) [1]	10 mg/m³ particulate 52 mg/m³ vapour
WEL TWA (OEL TWA) [2]	20 ppm vapour
WEL STEL (OEL STEL)	104 mg/m³ vapour
WEL STEL	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

Ethanediol (107-21-1)	
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 (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:
Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions.

8.2.2. Personal protection equipment

Personal protective equipment:
Wear recommended personal protective equipment.

8.2.2.1. Eye and face protection

Eye protection:
EN 166. Safety glasses with side shields

8.2.2.2. Skin protection

Skin and body protection:
Wear suitable protective clothing. Long sleeved protective clothing

Hand protection:
EN 374. Protective gloves. The recommendation is only valid for the supplied product and the stated application. Special working conditions, like heat or mechanical strain, which deviate from the test conditions, can reduce the protective effect provided by the recommended glove

Material	Permeation	Thickness (mm)	Comments
Nitrile rubber (NBR)	6 (> 480 minutes)	0,4	Glove recommendation: Camatril Velours® 730 (Kächele-Cama GmbH, source of supply see www.kcl.de) or comparable product.
In case of splash contact: Nitrile rubber (NBR)	6 (> 480 minutes)	0,4	Glove recommendation: Camatril Velours® 730 (Kächele-Cama GmbH, source of supply see www.kcl.de) or comparable product.

Other skin protection

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

8.2.2.3. Respiratory protection

Respiratory protection:
In case of insufficient ventilation, wear suitable respiratory equipment. Type A - High-boiling (>65 °C) organic compounds

8.2.2.4. Thermal hazards

Thermal hazard protection:
Wear appropriate thermal protective clothing, when necessary.

8.2.3. Environmental exposure controls

Environmental exposure controls:
Avoid release to the environment.

Other information:
Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	:	Liquid
Appearance	:	Clear.
Colour	:	Yellow.
Odour	:	Characteristic.
Odour threshold	:	No data available

pH	:	8 – 8.6
Relative evaporation rate (butylacetate=1)	:	No data available
Melting point	:	Not applicable
Freezing point	:	-37 °C
Boiling point	:	108 – 109 °C
Flash point	:	> 102 °C
Auto-ignition temperature	:	No data available
Decomposition temperature	:	No data available
Flammability (solid, gas)	:	Not applicable
Vapour pressure	:	< 0.1 mm Hg @ 20°C
Relative vapour density at 20 °C	:	No data available
Relative density	:	No data available
Density	:	1.063 – 1.073 kg/l @ 20°C
Solubility	:	Water solubility. completely soluble.
Log Pow	:	No data available
Viscosity, kinematic	:	No data available
Viscosity, dynamic	:	No data available
Explosive properties	:	Not explosive.
Oxidising properties	:	Non oxidizing.
Explosive limits	:	No data available

9.2. Other information

VOC (EU) : 1.38 %

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

Avoid heat, sparks, open flames and other ignition sources. Chlorates. Nitrates. Peroxides. Oxidising agents. Strong acids.

10.6. Hazardous decomposition products

At high temperatures : Ketones. Aldehydes. During fire, gases hazardous to health may be formed. Carbon oxides (CO, CO2). soot.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral)	:	Based on available data, the classification criteria are not met
Acute toxicity (dermal)	:	Based on available data, the classification criteria are not met
Acute toxicity (inhalation)	:	Based on available data, the classification criteria are not met

Antifreeze/Coolant POAT Ready Mix (P)	
ATE CLP (oral)	3200 mg/kg (calculated value)

Ethanediol (107-21-1)	
LD50 oral	1600 mg/kg (Cat)

Skin corrosion/irritation	:	Based on available data, the classification criteria are not met pH: 8 – 8.6
Serious eye damage/irritation	:	Based on available data, the classification criteria are not met pH: 8 – 8.6
Respiratory or skin sensitisation	:	Based on available data, the classification criteria are not met

Germ cell mutagenicity	:	Based on available data, the classification criteria are not met
Carcinogenicity	:	Based on available data, the classification criteria are not met
Reproductive toxicity	:	Based on available data, the classification criteria are not met
STOT-single exposure	:	Based on available data, the classification criteria are not met
STOT-repeated exposure	:	May cause damage to organs (kidneys) through prolonged or repeated exposure (oral).

Ethanediol (107-21-1)	
STOT-repeated exposure	May cause damage to organs (kidneys) through prolonged or repeated exposure (oral).

Aspiration hazard	:	Based on available data, the classification criteria are not met

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general	:	The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.
Hazardous to the aquatic environment, short-term (acute)	:	Not classified
Hazardous to the aquatic environment, long-term (chronic)	:	Not classified

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

Ethanediol (107-21-1)	
Log Pow	-1.36

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

Antifreeze/Coolant POAT Ready Mix (P)

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

Other adverse effects	:	No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this product.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional legislation (waste)	:	Dispose of in accordance with local regulations.
Waste treatment methods	:	Dispose of contents/container in accordance with licensed collector's sorting instructions.
Product/Packaging disposal recommendations	:	Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
Additional information	:	Disposal must be done according to official regulations.
European List of Waste (LoW) code	:	The Waste code should be assigned in discussion between the user, the producer and the waste disposal company. 16 01 14* - antifreeze fluids containing dangerous substances

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID
Not regulated for transport

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

15.1.1. EU-Regulations

EU restriction list (REACH Annex XVII)

Reference code	Applicable on
3(b)	Antifreeze/Coolant POAT Ready Mix (P) ; Ethanediol ; Sodium 2-ethylhexanoate

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

VOC content : 1.38 %

Other information, restriction and prohibition regulations : Directive 92/85/EEC on the safety and health of pregnant workers and workers who have recently given birth or are breastfeeding as amended. Directive 94/33/EC on the protection of young people at work, as amended. Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work, as amended. For details, refer to section 3 and 8.

Directive 2012/18/EU (SEVESO III)

Seveso Additional information : Not applicable

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Indication of changes:

Section 1 - Section 16.

Abbreviations and acronyms

ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
BLV	Biological limit value
BOD	Biochemical oxygen demand (BOD)
COD	Chemical oxygen demand (COD)
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC-No.	European Community number
EC50	Median effective concentration
EN	European Standard
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
OECD	Organisation for Economic Co-operation and Development
OEL	Occupational Exposure Limit
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet

STP	Sewage treatment plant
ThOD	Theoretical oxygen demand (ThOD)
TLM	Median Tolerance Limit
VOC	Volatile Organic Compounds
CAS-No.	Chemical Abstract Service number
N.O.S.	Not Otherwise Specified
vPvB	Very Persistent and Very Bioaccumulative
ED	Endocrine disrupting properties

Data sources : REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

Full text of H- and EUH-statements

Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
H302	Harmful if swallowed.
H361d	Suspected of damaging the unborn child.
H373	May cause damage to organs through prolonged or repeated exposure.
Repr. 2	Reproductive toxicity, Category 2
STOT RE 2	Specific target organ toxicity — Repeated exposure, Category 2

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]

STOT RE 2	H373	Calculation method

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

Attachment to the Safety Data Sheet

Product Name: Antifreeze/Coolant POAT Ready Mix (P)

Ford Int. Ref. No.: 502503 **Revision Date:** 08.03.2022

Involved Products:

	Finiscode	Part number	Container Size:
. 1	2 550 015	MU7J M97B57 AB	5 l