

ANTIFREEZE/COOLANT POAT (P)



SAFETY DATA SHEET

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

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

1.1. Product identifier

Trade name	Antifreeze/Coolant POAT (P)
Product code	Ford Internal Ref.: 201944
SDS Number	6979
Product use	Public use

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

Relevant identified uses	Antifreeze
Uses advised against	None known

1.3. Details of the supplier of the safety data sheet

Supplier	Distributor
Ford-Werke GmbH	Ford Motor Company Ltd.
Edsel-Ford-Str. 2-14	Parts Distribution Centre
50769 Cologne	Royal Oak Way South
Germany	NN11 8NT Daventry, Northants
+49 221 90-33333	United Kingdom
sdseu@ford.com	+44 1327 305 198

1.4. Emergency telephone number

+49 (0) 6132-84463 (GBK GmbH – 24/7)

2. SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008

Health hazards	Acute toxicity (oral), Category 4	H302	Harmful if swallowed.
	Specific target organ toxicity — Repeated exposure, Category 2	H373	May cause damage to organs (kidneys) through prolonged or repeated exposure (if swallowed).

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008

Hazard pictograms



Signal word	Warning
Contains	2,2' -oxybisethanol; Ethanediol
Hazard statements	
H302	Harmful if swallowed.
H373	May cause damage to organs (kidneys) through prolonged or repeated exposure (if swallowed).
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 vapours, mist.
 P264 Wash hands thoroughly after handling.
 P270 Do not eat, drink or smoke when using this product.

Response

P314 Get medical advice/attention if you feel unwell.

Disposal

P501 Dispose of contents/container to an approved waste disposal plant.

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.

3. 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	Notes
Ethanediol	107-21-1 203-473-3 603-027-00-1	75 - 95	Acute Tox. 4 (Oral), H302 STOT RE 2, H373	# substance with a Community workplace exposure limit
2,2'-oxybisethanol	111-46-6 203-872-2 603-140-00-6 01-2119457857-21-XXXX	0 - 5	Acute Tox. 4 (Oral), H302	
Sodium 2-ethylhexanoate	19766-89-3 243-283-8	1 - < 3	Repr. 2, H361d	

#: substance with a Community workplace exposure limit

Full text of H-statements: see section 16

4. SECTION 4: First aid measures**4.1. Description of first aid measures****General information**

Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

Inhalation

Remove person to fresh air and keep comfortable for breathing. Get medical advice/attention if you feel unwell.

Skin contact:

Remove contaminated clothing immediately and wash skin with soap and water. Get medical advice/attention if you feel unwell.

Eyes contact

Rinse immediately with plenty of water. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.

Ingestion

Rinse mouth. Remove person to fresh air and keep comfortable for breathing. Give water to drink. Seek medical attention immediately.

4.2. Most important symptoms and effects, both acute and delayed**Symptoms/effects after inhalation**

May cause irritation to the respiratory system.

Symptoms/effects after skin contact

May cause skin irritation.

Symptoms/effects after eye contact	May cause eye irritation.
Symptoms/effects after ingestion	Abdominal pain, nausea. Vomiting. Depression of the central nervous system, headaches, dizziness, drowsiness, loss of coordination. May affect kidneys.

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

Treat symptomatically.

5. 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

Fire hazard	No unusual fire or explosion hazards noted.
Hazardous combustion products	During fire, gases hazardous to health may be formed. Carbon oxides (CO, CO ₂).

5.3. Advice for firefighters

Precautionary measures fire	Move containers from fire area if it can be done without personal risk.
Firefighting instructions	Use standard firefighting procedures and consider the hazards of other involved materials.
Protection during firefighting	Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

6. SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Protective equipment	For personal protection, see section 8 of the SDS.
Emergency procedures	Ventilate spillage area. Do not breathe vapours, mist.

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".
Emergency procedures	Keep unnecessary personnel away.

6.2. Environmental precautions

Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up

Take up liquid spill into absorbent material. Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. Prevent product from entering drains. Following product recovery, flush area with water. Small spills: Stop leak without risks if possible. Wipe up with absorbent material (for example cloth). Clean surface thoroughly to remove residual contamination.

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 further information refer to section 13.

7. 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. Do not breathe vapours, mist. Avoid contact with skin and eyes. Do not cut, weld, solder, drill, grind, or expose containers to heat, flame, sparks, or other sources of ignition.

Hygiene measures

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

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions

Store in a dry, cool and well-ventilated place. Store in original tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).

7.3. Specific end use(s)

Antifreeze.

8. SECTION 8: Exposure controls/personal protection

8.1. Control parameters

EU

Regulation	Substance	Type	Value
COMMISSION DIRECTIVE 2000/39/EC	Ethenediol (107-21-1) Ethylene glycol	IOEL TWA	52 mg/m ³
		IOEL TWA [ppm]	20 ppm
		IOEL STEL	104 mg/m ³
		IOEL STEL [ppm]	40 ppm
		Notes	Skin

United Kingdom

Regulation	Substance	Type	Value
EH40/2005 (Fourth edition, 2020). HSE	2,2' -oxybisethanol (111-46-6) 2,2'-Oxydiethanol	WEL TWA (OEL TWA) [1]	101 mg/m ³
		WEL TWA (OEL TWA) [2]	23 ppm
EH40/2005 (Third edition, 2018). HSE	Ethenediol (107-21-1) Ethane-1,2-diol	WEL TWA (OEL TWA) [1]	10 mg/m ³ particulate 52 mg/m ³ vapour
		WEL TWA (OEL TWA) [2]	20 ppm vapour
		WEL STEL (OEL STEL)	104 mg/m ³ vapour
		WEL STEL	40 ppm vapour
		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)

Monitoring methods

Follow standard monitoring procedures

DNEL: Derived no effect level

No data available

Components	Type	Route	Value	Form
Ethenediol (107-21-1)	Worker	Dermal	106 mg/kg bodyweight/day	Long-term - systemic effects
		Inhalation	35 mg/m ³	Long-term - local effects
	Consumer	Dermal	53 mg/kg bodyweight/day	Long-term - systemic effects

Inhalation 7 mg/m³ Long-term - local effects

PNEC: Predicted no effect concentration

No data available

Components	Type	Route	Value	Form
Ethanediol (107-21-1)	Not applicable	Freshwater	10 mg/l	
		Seawater	1 mg/l	
		sediment	37 mg/kg dwt	Freshwater
		sediment	3.7 mg/kg dwt	Seawater
		Soil	1.53 mg/kg dwt	
		STP	199.5 mg/l	

8.2. Exposure controls

Appropriate engineering controls

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level

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

Individual protection measures, such as personal protective equipment (PPE)

Eye protection

Safety glasses. EN 166.

Skin protection

Hand protection

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 mm	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 mm	Glove recommendation: Camatril Velours® 730 (Kächele-Cama GmbH, source of supply see www.kcl.de) or comparable product.

Other protective measures

Wear suitable protective clothing.

Respiratory protection

[In case of inadequate ventilation] wear respiratory protection. Filter type: A-P2

Skin and body protection

Wear suitable protective clothing

Thermal hazard protection

Wear appropriate thermal protective clothing, when necessary.

Environmental exposure controls

Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases.

Consumer exposure controls

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.

9. SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Liquid
Appearance	Liquid.
Colour	Yellow.
Odour	Characteristic.
Odour threshold	No data available
pH	8.7 – 9.2
Relative evaporation rate (butylacetate=1)	No data available
Melting point	-36.6 – -37.7 °C
Freezing point	No data available

Boiling point	164 – 171 °C
Flash point	> 110 °C
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Flammability (solid, gas)	No data available
Vapour pressure	< 0.06 mm Hg (20 °C)
Relative vapour density at 20 °C	No data available
Relative density	1.07 – 1.14
Solubility	Soluble in water.
Log Pow	No data available
Viscosity, kinematic	No data available
Viscosity, dynamic	No data available
Explosive properties	Not applicable.
Oxidising properties	None.
Explosive limits	No data available

9.2. Other information

VOC (EU)	0 %
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10. 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	Excessive heat.
10.5. Incompatible materials	Strong oxidizing agents. Strong acids. Strong bases.
10.6. Hazardous decomposition products	Under normal conditions of storage and use, hazardous decomposition products should not be produced. Thermal decomposition may produce : Carbon oxides (CO, CO ₂).

11. SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity Harmful if swallowed.

Mixture

Name	Method	Type	Exposure route	Value	Unit	Species	Remarks
Antifreeze/Coolant POAT (P)	(calculated value)	ATE	oral	532	mg/kg		

Substance

Name	Method	Type	Exposure route	Value	Unit	Species	Remarks
2,2'-oxybisethanol (111-46-6)	(acc. CLP 3.1.2)	ATE	oral	500	mg/kg		
Ethanediol (107-21-1)	(acc. CLP 3.1.2)	ATE	oral	500	mg/kg		

Skin corrosion/irritation Based on available data, the classification criteria are not met.

Serious eye damage/irritation Based on available data, the classification criteria are not met.

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 (if swallowed).
Aspiration hazard	Based on available data, the classification criteria are not met

12. 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.
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12.2. Persistence and degradability

Antifreeze/Coolant POAT (P)

Persistence and degradability	Expected to be biodegradable.
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12.3. Bioaccumulative potential

Antifreeze/Coolant POAT (P)

Bioaccumulative potential	Low bioaccumulation potential.
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Ethanediol (107-21-1)

Log Pow	-1.36
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12.4. Mobility in soil

No additional information available.

12.5. Results of PBT and vPvB assessment

Antifreeze/Coolant POAT (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.
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13. SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional legislation (waste)	Dispose of in accordance with local regulations.
Waste treatment methods	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). Collect and reclaim or dispose in closed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations. Dispose of contents/container in accordance with licensed collector's sorting instructions.
Sewage disposal recommendations	Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container.
Product/Packaging disposal recommendations	Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.
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

14. SECTION 14: Transport information

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

15. SECTION 15: Regulatory information**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****EU-Regulations**

The following restrictions are applicable according to Annex XVII of the REACH Regulation (EC) No 1907/2006

Antifreeze/Coolant POAT (P) ; 2,2' -oxybisethanol ; Sodium 2-ethylhexanoate	3(b) 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
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Contains no substance on the REACH candidate list
Contains no REACH Annex XIV substances

VOC (EU)

0 %

Other information, restriction and prohibition regulations

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. Directive 94/33/EC on the protection of young people at work, as amended. Directive 92/85/EEC on the safety and health of pregnant workers and workers who have recently given birth or are breastfeeding as amended. For details, refer to section 3 and 8.

National regulations

No additional information available.

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

16. 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
AGW	Occupational exposure limit value
ATE	Acute Toxicity Estimate according to Regulation (EC) 1272/2008 (CLP)
BAM	Federal Institute for Materials Research and Testing, Germany
BAT	Maximum permissible concentration of biological working substances.
BCF	Bio-concentration factor.
BLV	Biological limit values
BLV	Biological limit values (BGW, Austria)
BMGV	Biological Monitoring Guidance Value (EH40,UK).
BOD5	Biochemical oxygen demand within 5 days
BOD	Biochemical oxygen demand
bw	Body weight.
calcd.	Calculated
CAS	Chemical Abstract Service.

CEN	European Committee for Standardization
CESIO	European Committee on Organic Surfactants and their Intermediates.
COD	Chemical oxygen demand
CLP	Classification, Labeling and Packaging REGULATION (EC) No 1272/2008 on classification, labeling and packaging of substances and mixtures.
CMR	Carcinogenic, Mutagenic or Reproduction Toxic Substances
CSA	Chemical safety assessment
CSR	Chemical Safety Report.
DMEL	Derived Minimum Effect Level.
DNEL	Derived no effect level
EAC	European waste catalogue
EC	European community
EC50	Effective concentration
EINECS	European Inventory of Existing Commercial Chemical Substances.
ELINCS	European List of Notified Chemical Substances.
EN	European norm.
ERC	ERC (Environmental Release category)
EU	European Union
GLP	Good Laboratory Practice.
GHS	Globally Harmonized System of Classification and Labeling of Chemicals.
GW/VL	Occupational exposure limit value.
GW-kw/VL-cd	Occupational exposure limit value - short term.
GW-M/VL-M	Occupational exposure limit value – "Ceiling".
IATA	International Air Transport Association
IBC code	International Bulk Chemical (Code) (International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk).
ICAO	International Civil Aviation Organization
IC50	Inhibition Concentration 50%.
IECSC	Inventory of Existing Chemical Substances in China.
IMDG	International Maritime Dangerous Goods
ISO	International Standards Organization.
IUPAC	International Union of Pure and Applied Chemistry
LC50	Lethal Concentration 50%.
LCLo	Lowest published lethal concentration.
LD50	Lethal Dose 50%.
LOAEL	Lowest Observed Adverse Effect Level
LOEC	Lowest observable effect concentration.
LOEL	Lowest observable effect level.
LQ	Limited quantities
TRK-Kzw	Threshold limit value - Short-term exposure limit / Technical reference concentration - short-time value, Austria.
MAK-Mow	Maximum allowable workplace concentration – instantaneous value, Austria.
MAK-Tmw, TRK-Tmw	Maximum allowable workplace concentration – daily mean value / Technical standard concentration – daily mean value, Austria.
MAK	Threshold limit values Germany.
MARPOL	International Convention for the Prevention of Pollution from Ships.
NOAEC	No-Observed Adverse Effect Concentration

NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
NOEL	no-observed-effect level
OECD	Organisation for Economic Co-operation and Development
OEL	Occupational Exposure Limits
PBT	Persistent Bioaccumulative Toxic
PC (Chemical product category)	PC (Chemical product category)
PNEC	Predicted No-Effect Concentration
POCP	Photochemical ozone creation potential.
POP	Persistent Organic Pollutants
PPE	Personal protective equipment
Process category	Process category
REACH	Registration, Evaluation and Authorization of Chemicals (REGULATION (EC) No 1907/2006 concerning Registration, Evaluation Authorization and Restriction of Chemicals).
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SCL	Specific concentration limit.
STEL	Short-term Exposure Limit
STP	Sewage treatment plant
SU (Sector of use)	SU (Sector of use)
SVHC	Substance of Very High Concern.
TLV	Threshold Limit Value
TRGS	Technical Rules for Hazardous Substances (German Standard).
TWA	Time Weighted Average
UVCB	Substances of Unknown or Variable composition, Complex reaction products or Biological materials
VbF	Ordinance on Flammable Liquids, Austria
VOC	Volatile organic compounds
vPvB	Very Persistent and Very Bioaccumulative
WEL-TWA	Workplace Exposure Limit-Long term exposure limit (8-hour TWA(=time weighted average)reference period).
WEL-STEL	Workplace Exposure Limit-Short term exposure limit (15-minute reference period).

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..

Training advice Normal use of this product shall imply use in accordance with the instructions on the packaging

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..

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

Acute Tox. 4 (Oral)	H302	Calculation method
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 (P)

Ford Int. Ref. No.: 201944

REVISION DATE: 19.02.2021

Involved Products:

	Finiscode	Part number	Container Size:
.	1 2 511 500	KU7J M97B57 CA	1 l
.	2 2 511 503	KU7J M97B57 CB	5 l
.	3 2 511 505	KU7J M97B57 CC	60 l