

ANTIFREEZE/COOLANT POAT READY MIX (P)



SAFETY DATA SHEET

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

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VERSION: 1.0

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

1.1. Product identifier

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

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

2. SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

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

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

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.

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 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	

#: substance with a Community workplace exposure limit

Full text of H- and EUH-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. Never give anything by mouth to an unconscious person. If medical advice is needed, have product container or label at hand.

Inhalation

Remove person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms: Call a poison center or a doctor.

Skin contact:

Wash skin with soap and water. If skin irritation occurs: Get medical advice/attention.

Eyes 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 ophthalmologist if irritation persists.

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.

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

Hazardous combustion products	During fire, gases hazardous to health may be formed. smokes. Carbon oxides (CO, CO ₂). Hydrocarbon substances with low molecular weight and their oxidation products.
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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.

6. SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

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.

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".
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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".

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.
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.

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	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)

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/m ³	Long-term - local effects

PNEC: Predicted no effect concentration

No data available

Components	Type	Route	Value	Form
Ethenediol (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

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	EN 166. Safety glasses with side shields		
Skin protection			
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 protective 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.		
Respiratory protection	In case of insufficient ventilation, wear suitable respiratory equipment. Type A - High-boiling (>65 °C) organic compounds		
Skin and body protection	Wear suitable protective clothing, Long sleeved protective clothing		
Thermal hazard protection	Wear appropriate thermal protective clothing, when necessary.		
Environmental exposure controls	Avoid release to the environment.		

9. 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 %
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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** 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.

11. SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity Based on available data, the classification criteria are not met.

Mixture

Name	Method	Type	Exposure route	Value	Unit	Species	Remarks
Antifreeze/Coolant POAT Ready Mix (P)	(calculated value)	ATE	oral	3200	mg/kg		

Substance

Name	Method	Type	Exposure route	Value	Unit	Species	Remarks
Ethanediol (107-21-1)		LD50	oral	1600	mg/kg	Cat	

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 (oral).

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.

12.2. Persistence and degradability

No additional information available.

12.3. Bioaccumulative potential

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 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.

13. 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. antifreeze fluids containing dangerous substances
16 01 14*	

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 Ready Mix (P) ; Ethanediol ; 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)	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.
Seveso Information	Not applicable

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

None.

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..

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]

STOT RE 2	H373	Calculation method
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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: 29.04.2021

Involved Products:

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