ANTIFREEZE/COOLANT HT-FVA



SAFETY DATA SHEET

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

ISSUE DATE: 09.03.2022 REVISION DATE: 19.11.2024 SUPERSEDES: 04.02.2022

VERSION: 1.2

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

1.1. Product identifier

Product form : Mixture

Trade name : Antifreeze/Coolant HT-FVA
Product code : Ford Internal Ref.: 505849

SDS Number : 9561

UFI : DEX5-QFEF-A100-06EK
Product use : Professional 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 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)

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 Acute toxicity (oral), Category 4 H302 Harmful if swallowed.

Specific target organ toxicity – H373 May cause damage to organs through Repeated exposure, Category 2 prolonged or repeated exposure.

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

H302 Harmful if swallowed

H373 May cause damage to organs through prolonged or repeated exposure.

Precautionary statements

Prevention

P264 Wash hands thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

Response

P301+P312 IF SWALLOWED: Call doctor, a POISON CENTER if you feel unwell.

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.

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of 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 Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical name	CAS- No	%	Classification according to	Notes
	EC- No		Regulation (EC) No.	
	Index No		1272/2008 [CLP]	
	RRN			
Ethanediol	107-21-1	90 - <	Acute Tox. 4 (Oral), H302	substance with a Community
	203-473-3	100	(ATE=500 mg/kg)	workplace exposure limit
	603-027-00-1		STOT RE 2, H373	
	01-2119456816-28-XXXX			
Disodium sebacate	17265-14-4	1 - < 10	Eye Irrit. 2, H319	
	241-300-3			
	-			
	01-2120762063-61-XXXX			
Methyl-1H-benzotriazole	29385-43-1	0,1 - <	Acute Tox. 4 (Oral), H302	
	249-596-6	0,25	(ATE=500 mg/kg	
	-		bodyweight)	
	01-2119979081-35-XXXX		Repr. 2, H361d	
			Aquatic Chronic 2, H411	

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.

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Get medical advice/attention.

First-aid measures after skin contact : Take off immediately all contaminated clothing and wash it before reuse. Wash immediately with

plenty of water. Get medical advice/attention.

First-aid measures after eye contact : Rinse immediately and thoroughly, pulling the eyelids well away from the eye (15 minutes

minimum). Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician

immediately.

First-aid measures after ingestion : Do not induce vomiting. Rinse mouth thoroughly. Get immediate medical advice/attention.

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

Symptoms/effects after ingestion : May cause damage to organs (kidneys) (oral). Harmful if swallowed.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Dry chemical, CO2, or water spray or regular foam.

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 : During fire, gases hazardous to health may be formed.

Hazardous decomposition products in case of fire : Carbon oxides (CO, CO2). Metal oxides.

5.3. Advice for firefighters

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

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Protective equipment and clothing during clean-up. Use personal protection

recommended in Section 8 of the MSDS.

Emergency procedures : Ventilate spillage area. Evacuate unnecessary personnel. Avoid contact with skin, eyes and

clothing. Local authorities should be advised if significant spillages cannot be contained. Wear

appropriate protective equipment and clothing during clean-up.

6.1.2. For emergency responders

Protective equipment : Wear recommended personal protective equipment. For personal protection, see section 8 of the

SDS.

Emergency procedures : Keep unnecessary personnel away. Ventilate area.

6.2. Environmental precautions

Avoid release to the environment. Avoid discharge into drains, water courses or onto the ground. Prevent further leakage or spillage if safe to do so. Inform appropriate managerial or supervisory personnel of all environmental releases.

6.3. Methods and material for containment and cleaning up

For containment : Stop leak without risks if possible. Move containers from fire area if it can be done without personal

risk.

Methods for cleaning up : Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is

possible. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water. Small spills: Take up liquid spill into absorbent material. Clean surface thoroughly to remove residual contamination. Never return spills in original containers for

re-use.

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 : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Ground/bond container and receiving equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Flammable vapours may accumulate in the container. Use explosion-proof equipment. Wear personal protective equipment. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use only outdoors or in a well-ventilated area. Avoid breathing dust/fume/gas/mist/vapours/spray. Avoid release to the

environment. Avoid contact with skin, eyes and clothing.

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. Observe good industrial hygiene practices.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Ensure adequate ventilation, especially in confined areas.

Storage conditions : Store locked up. Store in a dry, cool and well-ventilated place.

Incompatible materials: Oxidation agents.Maximum storage period: 60 monthsStorage temperature: >-35 °C

7.3. Specific end use(s)

Antifreeze.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Long-term - systemic effects, dermal

Long-term - local effects, inhalation

DNEL/DMEL (General population)Long-term - systemic effects, dermal

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		
	20 ppm		
IOEL STEL	104 mg/m³		
	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)	10 mg/m³ particulate 52 mg/m³ vapour		
	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			
Ethanediol (107-21-1)			
DNEL/DMEL (Workers)			

Product code: Ford Internal Ref.: 505849 GB - en Revision date: 11/19/2024 4/11

106 mg/kg bodyweight/day

53 mg/kg bodyweight/day

35 mg/m³

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 (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
Disodium sebacate (17265-14-4)	
DNEL/DMEL (Workers)	
Long-term - systemic effects, dermal	10 mg/kg bw/day
Long-term - systemic effects, inhalation	35.26 mg/m³
DNEL/DMEL (General population)	
Long-term - systemic effects,oral	5 mg/kg bw/day
Long-term - systemic effects, inhalation	8.7 mg/m³
Long-term - systemic effects, dermal	5 mg/kg bw/day
PNEC (Water)	
PNEC aqua (freshwater)	0.018 mg/l
PNEC aqua (marine water)	0.002 mg/l
PNEC (Sediment)	
PNEC sediment (freshwater)	0.548 mg/kg dwt
PNEC sediment (marine water)	0.055 mg/kg dwt
PNEC (Soil)	
PNEC soil	0.099 mg/kg dwt
PNEC (STP)	
PNEC sewage treatment plant	10 mg/l
Methyl-1H-benzotriazole (29385-43-1)	
DNEL/DMEL (Workers)	
Long-term - systemic effects, dermal	0.3 mg/kg bw/day
Long-term - systemic effects, inhalation	21.2 mg/m³
DNEL/DMEL (General population)	
Long-term - systemic effects,oral	0.01 mg/kg bw/day
Long-term - systemic effects, inhalation	350 μg/m³
Long-term - systemic effects, dermal	0.01 mg/kg bw/day
PNEC (Water)	
PNEC aqua (freshwater)	0.008 mg/l
PNEC aqua (marine water)	20 μg/L
PNEC aqua (intermittent, freshwater)	0.086 mg/l

PNEC aqua (intermittent, marine water) 53 µg/L

PNEC (Sediment)

PNEC sediment (freshwater)

0.117 mg/kg wet weight

PNEC sediment (marine water)

0.292 mg/kg wet weight

PNEC (Soil)

PNEC soil $18.7 \mu g/kg dw$

PNEC (Oral)

PNEC oral (secondary poisoning)

No bioaccumulation potential

PNEC (STP)

PNEC sewage treatment plant 39.4 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. 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.

8.2.2. Personal protection equipment

Personal protective equipment:

Personal protective equipment should be chosen according to the CEN standards and in discussion with the supplier of the protective equipment.

8.2.2.1. Eye and face protection

Eye protection:

Safety glasses with side shields. EN 166.

8.2.2.2. Skin protection

Skin and body protection:

Wear suitable protective clothing. Long sleeved protective clothing. EN 14605. EN ISO 13982

Hand protection:

Protective gloves. ISO 374-1. 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 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:

If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. Extra personal protection: A/P2 filter respirator for organic vapour and harmful dust

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. Inform appropriate managerial or supervisory personnel of all environmental releases.

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 Colour : Purple. : Characteristic. Odour Odour threshold : Not available Melting point : Not available Freezing point : Not available Boiling point : > 170 °C : Not available Flammability : Not explosive. Explosive properties Oxidising properties : Non oxidizing. Explosive limits Not available Lower explosive limit (LEL) : Not available Upper explosive limit (UEL) : Not available : > 110 °C Flash point : Not available Auto-ignition temperature Decomposition temperature : Not available : ≤ 8.4 100%

Viscosity, kinematic : 20 – 30 mm²/s @ 20°C

Solubility : Miscible (in all proportions) with : water.

Log Kow : Not available
Vapour pressure : 0.2 hPa @ 20°C
Vapour pressure at 50°C : Not available
Density : 1.125 g/cm³ @ 20°C
Relative density : Not available
Relative vapour density at 20°C : Not available
Particle size : Not applicable

Particle size : Not applicable
Particle size distribution : Not applicable
Particle shape : Not applicable
Particle aspect ratio : Not applicable
Particle aggregation state : Not applicable
Particle agglomeration state : Not applicable
Particle specific surface area : Not applicable
Particle dustiness : Not applicable

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 : 92 %

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. Reacts with: Oxidizing agent.

10.4. Conditions to avoid

No additional information available

10.5. Incompatible materials

Oxidizing agent.

10.6. Hazardous decomposition products

No additional information available

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity (oral) : Harmful if swallowed.

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

. Dased on available data, the classification chieffa are not met	
543.48 mg/kg bodyweight (calculated value)	
7712 mg/kg	
> 3500 mg/kg	
500 mg/kg	
> 2000 mg/kg bodyweight	
: Based on available data, the classification criteria are not met	
pH: ≤ 8.4 100% Based on available data, the classification criteria are not met pH: ≤ 8.4 100%	
: Based on available data, the classification criteria are not met	
: Based on available data, the classification criteria are not met	
: Based on available data, the classification criteria are not met	
: Based on available data, the classification criteria are not met	
: Based on available data, the classification criteria are not met	
: May cause damage to organs through prolonged or repeated exposure.	
150 mg/kg bodyweight/day	
May cause damage to organs (kidneys) through prolonged or repeated exposure (oral).	
: Based on available data, the classification criteria are not met	
20 – 30 mm²/s @ 20°C	

11.2. Information on other hazards

No additional information available

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)

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

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Hazardous to the aquatic environment, long-term

(chronic)

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

Methyl-1H-benzotriazole (29385-43-1)

EC50 - Crustacea [1] 8.58 mg/l

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 HT-FVA

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. Endocrine disrupting properties

No additional information available

12.7. 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 waste regulation

: 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). Dispose of in accordance with local regulations.

Waste treatment methods

Collect and reclaim or dispose in closed containers at licensed waste disposal site. Do not contaminate ponds, waterways or ditches with chemical or used container. Do not allow to enter drains or water courses. Dispose of contents/container in accordance with licensed collector's sorting instructions.

European List of Waste (LoW, EC 2000/532)

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

15 01 10* - packaging containing residues of or contaminated by 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 HT-FVA; Ethanediol

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

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

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

VOC content : 92 %

Other information, restriction and prohibition regulations: 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. 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.

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:

General.

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

STEL Short-term Exposure Limit
VOC Volatile organic compounds
ATE Acute Toxicity Estimate
BCF Bioconcentration factor

CLP Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008

DMEL Derived Minimal Effect level
DNEL Derived-No Effect Level
EC50 Median effective concentration

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

 PBT
 Persistent Bioaccumulative Toxic

 PNEC
 Predicted No-Effect Concentration

REACH Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006

SDS Safety Data Sheet
STP Sewage treatment plant
TLM Median Tolerance Limit

vPvB Very Persistent and Very Bioaccumulative

OEL Occupational Exposure Limit RRN REACH Registration no.

TWA Time Weighted Average. The average concentration of a chemical in air over the total exposure time-usually an 8-hour

workday.

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

Aquatic Chronic 2 Hazardous to the aquatic environment – Chronic Hazard, Category 2

Eye Irrit. 2 Serious eye damage/eye irritation, Category 2

H302 Harmful if swallowed.

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H319 Causes serious eye irritation.

H361d Suspected of damaging the unborn child.

H373 May cause damage to organs through prolonged or repeated exposure.

H411 Toxic to aquatic life with long lasting effects.

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]

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



Productname: Antifreeze/Coolant HT-FVA

Ford Internal Ref.: 505849 Revision Date: 19.11.2024

Involved Products:

Finiscode Part Number Packaging

1 2 610 438 MU7J 19544 BA 5 I