TYRE SEALANT DL-FVA

SAFETY DATA SHEET

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

ISSUE DATE: 13.05.2022
REVISION DATE: 31.08.2023
SUPERSEDES: 13.05.2022
VERSION: 1.1

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

1.1. Product identifier

Product form	:	Mixture
Trade name	:	Tyre Sealant DL-FVA
Product code	:	Ford Internal Ref.: 506395
SDS Number	:	9510
UFI	:	Q9F7-2F96-J106-6KKT
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	:	Adhesives, sealants

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 through 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

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

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.

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.

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 is 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 EC- No Index No RRN	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]	Notes
Natural rubber	9006-04-6 232-689-0	35 - < 45	Skin Sens. 1B, H317	Exempted from REACH registration
Ethanediol	107-21-1 203-473-3 603-027-00-1 01-2119456816-28-XXXX	15 - < 25	Acute Tox. 4 (Oral), H302 (ATE=500 mg/kg bodyweight) STOT RE 2, H373	substance with a Community workplace exposure limit
ammonia	1336-21-6 215-647-6 007-001-01-2 01-2119982985-14-XXXX	0,1 - < 0,5	Skin Corr. 1B, H314 Aquatic Acute 1, H400 (M=1.0)	(5 ≤ C ≤ 100) STOT SE 3, H335 substance with a Community workplace exposure limit (Note B)

Note B - Some substances (acids, bases, etc.) are placed on the market in aqueous solutions at various concentrations and, therefore, these solutions require different classification and labelling since the hazards vary at different concentrations. In Part 3 entries with Note B have a general designation of the following type: '... %'. In this case the supplier must state the percentage concentration of the solution on the label. Unless otherwise stated, it is assumed that the percentage concentration is calculated on a weight/weight basis.
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: : May cause damage to organs (kidneys) 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 : Use extinguishing media appropriate for surrounding fire.

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. Carbon oxides (CO, CO2). Nitrous gas.

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 : Wear appropriate 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 : 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 disposal of residues refer to section 13 :" Disposal considerations".

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Use only outdoors or in a well-ventilated area. Avoid breathing vapours. 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.
Storage temperature	:	> 15 °C

7.3. Specific end use(s)

Adhesives, Sealants.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1. National occupational exposure and biological limit values

Ethanediol (107-21-1)

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

ammonia (1336-21-6)

United Kingdom - Occupational Exposure Limits

Local name	Ammonia, anhydrous
WEL TWA (OEL TWA) [1]	18 mg/m³
WEL TWA (OEL TWA) [2]	25 ppm
WEL STEL (OEL STEL)	25 mg/m³
WEL STEL	35 ppm
Regulatory reference	EH40/2005 (Third edition, 2018). 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. 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. Gas filters. A

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	:	white.
Appearance	:	Liquid.
Odour	:	Ammoniacal.
Odour threshold	:	Not available
Melting point	:	Not available
Freezing point	:	Not available
Boiling point	:	Not available
Flammability	:	Not available
Explosive limits	:	Not available
Lower explosive limit (LEL)	:	Not available
Upper explosive limit (UEL)	:	Not available
Flash point	:	Not available
Auto-ignition temperature	:	Not available
Decomposition temperature	:	Not available
pH	:	≈ 10
Viscosity, kinematic	:	Not available
Solubility	:	Miscible with water.
Log Kow	:	Not available
Vapour pressure	:	Not available
Vapour pressure at 50°C	:	Not available
Density	:	≈ 1 g/cm³ @ 20°C
Relative density	:	Not available
Relative vapour density at 20°C	:	Not available
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	:	0 %

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

Overheating.

10.5. Incompatible materials

Oxidizing agent. Solvent.

10.6. Hazardous decomposition products

Carbon oxides (CO, CO2). Nitrous gasses.

SECTION 11: Toxicological information

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

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

Tyre Sealant DL-FVA	
ATE CLP (oral)	> 2000 mg/kg (calculated value)

Ethanediol (107-21-1)	
ATE CLP (oral)	500 mg/kg bodyweight

Skin corrosion/irritation : Based on available data, the classification criteria are not met
pH: ≈ 10
Serious eye damage/irritation : Based on available data, the classification criteria are not met
pH: ≈ 10
Respiratory or skin sensitisation : Based on available data, the classification criteria are not met (Skin sensitization (guinea pig): Not sensitizing [OECD 406])
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 through prolonged or repeated exposure.

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

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
Hazardous to the aquatic environment, long–term (chronic) : Based on available data, the classification criteria are not met

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

Tyre Sealant DL-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 legislation (waste) : 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.

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)	Tyre Sealant DL-FVA ; Ethanediol ; ammonia
3(c)	ammonia

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 : 0 %

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:
Part Number(s).

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.
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
Aquatic Acute 1	Hazardous to the aquatic environment – Acute Hazard, Category 1
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H335	May cause respiratory irritation.
H373	May cause damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
Skin Corr. 1B	Skin corrosion/irritation, Category 1, Sub-Category 1B
Skin Sens. 1B	Skin sensitisation, category 1B
STOT RE 2	Specific target organ toxicity – Repeated exposure, Category 2
STOT SE 3	Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation

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: Tyre Sealant DL-FVA

Ford Int. Ref. No.: 506395 **Revision Date:** 31.08.2023

Involved Products:

	Finiscode	Part number	Container Size:
1	2 744 867	VWN3CA 1568 BB	450 ml