

# HARDENER H-FVA



## SAFETY DATA SHEET

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

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**VERSION: 1.1**

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

#### 1.1. Product identifier

Product form : Mixture  
Trade name : Hardener H-FVA  
Product code : Ford Internal Ref: 505695  
SDS Number : 9547  
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 : 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

This mixture does not meet the criteria for classification according to Regulation (EC) 1272/2008 as amended.

#### 2.2. Label elements

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

EUH-statements EUH210 - Safety data sheet available on request.

#### 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 EC- No Index No RRN	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]	Notes
Propylidynetrimethanol	77-99-6 201-074-9 01-2119486799-10-XXXX	0,1 - < 1	Repr. 2, H361fd	
bis(2-dimethylaminoethyl)(methyl)amine	3030-47-5 221-201-1 612-109-00-6	0,1 - < 0,5	Acute Tox. 3 (Dermal), H311 (ATE=300 mg/kg bodyweight) Acute Tox. 4 (Oral), H302 (ATE=500 mg/kg bodyweight) Skin Corr. 1B, H314	

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 if you feel unwell.
First-aid measures after skin contact	: Wash immediately with plenty of water. Take off contaminated clothing. Wash clothing before re-using. 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. Get medical advice/attention.
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

No additional information available

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

Provide general supportive measures and treat symptomatically.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

Suitable extinguishing media	: All types of fire extinguishers are suitable.
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.
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### 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.
Other information	: Cool containers exposed to heat with water spray and remove container, if no risk is involved.

## 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.
Methods for cleaning up	: Mechanically recover the product.
Other information	: Dispose of materials or solid residues at an authorized site. Never return spills in original containers for re-use.

### 6.4. Reference to other sections

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

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Precautions for safe handling	: Ensure good ventilation of the work station. Avoid contact with skin and eyes. Wear personal protective equipment. Avoid breathing vapours, mist. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Avoid release to the environment.
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	: 5 – 25 °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

##### Exposure limit values for the other components

Silica, amorphous, fumed, cryst.-free (112945-52-5)
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##### United Kingdom - Occupational Exposure Limits

WEL TWA (OEL TWA)	6 mg/m <sup>3</sup> Inhalable aerosol
	2.4 mg/m <sup>3</sup> respirable aerosol

#### 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

#### Propylidynetrimethanol (77-99-6)

##### DNEL/DNEL (Workers)

Long-term - systemic effects, dermal 0.94 mg/kg bw/day

Long-term - systemic effects, inhalation 3.3 mg/m<sup>3</sup>

##### DNEL/DNEL (General population)

Long-term - systemic effects, oral 0.34 mg/kg bw/day

Long-term - systemic effects, inhalation 0.58 mg/m<sup>3</sup>

Long-term - systemic effects, dermal 0.34 mg/kg bw/day

### 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. DIN ISO 374. 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 <a href="http://www.kcl.de">www.kcl.de</a> ) 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 <a href="http://www.kcl.de">www.kcl.de</a> ) 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. ABEK-P2

### 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	: Solid
Colour	: Cream.
Appearance	: Solid.
Odour	: Characteristic.
Odour threshold	: Not available
Melting point	: Not available
Freezing point	: Not available
Boiling point	: Not available
Flammability	: Not available
Explosive limits	: Not applicable
Lower explosive limit (LEL)	: Not applicable
Upper explosive limit (UEL)	: Not applicable
Flash point	: Not applicable
Auto-ignition temperature	: Not applicable
Decomposition temperature	: Not available
pH	: Not applicable
pH solution	: Not available
Viscosity, kinematic	: Not applicable
Solubility	: Insoluble in: water.
Log Kow	: Not available
Vapour pressure	: Not available
Vapour pressure at 50°C	: Not available
Density	: 1.4 g/cm <sup>3</sup> @ 20°C
Relative density	: Not available
Relative vapour density at 20°C	: Not applicable
Particle size	: Not available
Particle size distribution	: Not available
Particle shape	: Not available
Particle aspect ratio	: Not available
Particle aggregation state	: Not available
Particle agglomeration state	: Not available
Particle specific surface area	: Not available
Particle dustiness	: Not available

### 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 : 0.3 %

## 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

Contact with incompatible materials.

### 10.5. Incompatible materials

Oxidizing agent. Strong acids. Strong bases.

### 10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## 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

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ATE CLP (dermal)	> 5000 mg/kg
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Skin corrosion/irritation	: Based on available data, the classification criteria are not met pH: Not applicable
Serious eye damage/irritation	: Based on available data, the classification criteria are not met pH: Not applicable
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	: Based on available data, the classification criteria are not met
Aspiration hazard	: Based on available data, the classification criteria are not met

### 11.2. Information on other hazards

#### 11.2.1. Endocrine disrupting properties

Adverse health effects caused by endocrine disrupting properties	: 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 %
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#### 11.2.2. Other information

## 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

No additional information available

### 12.4. Mobility in soil

No additional information available

## 12.5. Results of PBT and vPvB assessment

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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

Adverse effects on the environment caused by endocrine disrupting properties

: 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 %

## 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)

: 08 04 10 - waste adhesives and sealants other than those mentioned in 08 04 09  
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)

bis(2-dimethylaminoethyl)(methyl)amine

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 : 0.3 %

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:

Composition/information on ingredients. SECTION 4. SECTION 6. SECTION 8. Section 9. SECTION 10. SECTION 11. SECTION 12. SECTION 13. SECTION 15.

### 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. 3 (Dermal)	Acute toxicity (dermal), Category 3
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Repr. 2	Reproductive toxicity, Category 2
Skin Corr. 1B	Skin corrosion/irritation, Category 1, Sub-Category 1B
H302	Harmful if swallowed.
H311	Toxic in contact with skin.
H314	Causes severe skin burns and eye damage.
H361fd	Suspected of damaging fertility. Suspected of damaging the unborn child.
EUH210	Safety data sheet available on request.

*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: Hardener H-FVA

Ford Internal Ref.: 505695

Revision Date: 20.08.2025

Involved Products:

Finiscode	Part Number	Packaging	Part of Kit		
1	MU7J 3633164 CA	200 ml	2 605 227	MU7J 3633164 AA	Windscreen Adhesive Kit – 2 Component H-FVA