



# HARDENER H

## SAFETY DATA SHEET

according to Regulation (EU) 2015/830

ISSUE DATE: 13.01.2015

REVISION DATE: 10.12.2019

SUPERSEDES DATE: 01.07.2016

VERSION: 2.2

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

#### 1.1. Product identifier

Trade name	Hardener H
Product code	Ford Internal Ref.: 183190
SDS Number	8059
Product use	Professional use

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

Relevant identified uses	Hardner
Uses advised against	Unknown

#### 1.3. Details of the supplier of the safety data sheet

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

#### 1.4. Emergency telephone number

+49 (0) 6132-84463 (GBK GmbH – 24/7)

### 2. SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

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

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

#### 2.2. Label elements

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

#### 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

This mixture does not contain any substances to be mentioned according to the criteria of section 3.2 of REACH annex II.

### 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.
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<b>Inhalation</b>	Remove person to fresh air and keep comfortable for breathing. Get medical advice/attention if you feel unwell.
<b>Skin contact:</b>	Wash skin with plenty of water. Wash contaminated clothing before reuse. If skin irritation or rash occurs: Get medical advice/attention.
<b>Eyes contact</b>	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
<b>Ingestion</b>	Rinse mouth thoroughly. Do NOT induce vomiting. Get medical advice/attention if you feel unwell.

#### 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

Treat symptomatically.

### 5. SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

<b>Suitable extinguishing media</b>	Foam. Dry chemical, CO <sub>2</sub> , dry sand, or alcohol-resistant foam.
<b>Unsuitable extinguishing media</b>	Do not use water jet as an extinguisher, as this will spread the fire.

#### 5.2. Special hazards arising from the substance or mixture

<b>Hazardous combustion products</b>	During fire, gases hazardous to health may be formed.
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#### 5.3. Advice for firefighters

<b>Precautionary measures fire</b>	Cool containers exposed to heat with water spray and remove container, if no risk is involved.
<b>Firefighting instructions</b>	Use standard firefighting procedures and consider the hazards of other involved materials.
<b>Protection during firefighting</b>	Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

### 6. SECTION 6: Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures

<b>General measures</b>	If spilled, may cause the floor to be slippery.
<b>For non-emergency personnel</b>	
<b>Protective equipment</b>	Wear appropriate protective equipment and clothing during clean-up. For further information refer to section 8: "Exposure controls/personal protection".
<b>Emergency procedures</b>	Keep people away from and upwind of spill/leak. Keep unnecessary personnel away. Ventilate spillage area. Wear appropriate protective equipment and clothing during clean-up. Local authorities should be advised if significant spillages cannot be contained.
<b>For emergency responders</b>	
<b>Protective equipment</b>	Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".
<b>Emergency procedures</b>	Keep unnecessary personnel away.

**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 the flow of material, if this is without risk. Move containers from fire area if it can be done without personal risk.

**Methods for cleaning up** Large Spills: Stop leak if safe to do so. 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. Following product recovery, flush area with water. Small spills: Wipe up with absorbent material (e.g. cloth, fleece). 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".

## **7. SECTION 7: Handling and storage**

### **7.1. Precautions for safe handling**

**Precautions for safe handling** Ensure good ventilation of the work station. Avoid release to the environment. Avoid contact with skin, eyes and clothing. Wear appropriate personal protective equipment. Protect material from direct sunlight. Observe good industrial hygiene practices.

**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 original container. Store tightly closed in a dry, cool and well-ventilated place. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Protect against frost.

**Storage temperature** 15 - 25 °C

**7.3. Specific end use(s)** Hardner.

## **8. SECTION 8: Exposure controls/personal protection**

### **8.1. Control parameters**

Contains no substances with occupational exposure limits.

**DNEL: Derived no effect level**

No data available

**PNEC: Predicted no effect concentration**

No data available

### **8.2. Exposure controls**

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

**Materials for protective clothing** Personal protection equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment

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

**Eye protection** Safety glasses with side shields. EN 166.

## Skin protection

### Hand protection

The recommendation is only valid for the supplied product and the stated application. Special working conditions, like heat or mechanical strain, which deviate from the test conditions, can reduce the protective effect provided by the recommended glove

Material	Permeation	Thickness (mm)	Comments
Nitrile rubber (NBR)	6 (> 480 minutes)	0.4	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. ABEK-P2. EN 14387

### Skin and body protection

Wear suitable protective clothing, EN 14605, EN ISO 13982

### Thermal hazard protection

Wear appropriate thermal protective clothing, when necessary.

### Environmental exposure controls

Inform appropriate managerial or supervisory personnel of all environmental releases.

## 9. SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state	Liquid
Appearance	Liquid.
Colour	Colourless.
Odour	Characteristic.
Odour threshold	No data available
pH	9 @ 20°C (68 °F)
Relative evaporation rate (butylacetate=1)	No data available
Melting point	No data available
Freezing point	No data available
Boiling point	No data available
Flash point	Not applicable.
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Flammability (solid, gas)	No data available
Vapour pressure	157 mbar @ 55 °C (131 °F)
Relative vapour density at 20 °C	No data available
Relative density	No data available
Density	1 g/cm <sup>3</sup> @ 20 °C (68 °F)
Solubility	completely miscible with: water. Water: @ 20°C (68 °F)
Log Pow	No data available
Viscosity, kinematic	No data available
Viscosity, dynamic	No data available
Explosive properties	No data available
Oxidising properties	No data available
Explosive limits	No data available

### 9.2. Other information

VOC (EU)	0 %
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## 10. SECTION 10: Stability and reactivity

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|------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 10.1. Reactivity                         | The product is stable and non reactive under normal conditions of use, storage and transport.                                                              |
| 10.2. Chemical stability                 | Stable under normal conditions of use.                                                                                                                     |
| 10.3. Possibility of hazardous reactions | No dangerous reactions known under normal conditions of use.                                                                                               |
| 10.4. Conditions to avoid                | Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.                                                            |
| 10.5. Incompatible materials             | Strong oxidizing agent. Strong bases.                                                                                                                      |
| 10.6. Hazardous decomposition products   | Under normal conditions of storage and use, hazardous decomposition products should not be produced. During fire, gases hazardous to health may be formed. |

## 11. SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

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

No additional information available.

### 12.4. Mobility in soil

No additional information available.

### 12.5. Results of PBT and vPvB assessment

#### Hardener H

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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. 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

<b>Regional legislation (waste)</b>	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.
<b>Waste treatment methods</b>	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.
<b>Product/Packaging disposal recommendations</b>	Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.
<b>Additional information</b>	Dispose in accordance with all applicable regulations.
<b>European List of Waste (LoW) code</b>	The Waste code should be assigned in discussion between the user, the producer and the waste disposal company.
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

## 14. SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN  
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

Contains no REACH substances with Annex XVII restrictions  
Contains no substance on the REACH candidate list  
Contains no REACH Annex XIV substances

**VOC (EU)** 0 %

**Other information, restriction and prohibition regulations** Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work, as amended. Directive 94/33/EC on the protection of young people at work, as amended. Directive 92/85/EEC on the safety and health of pregnant workers and workers who have recently given birth or are breastfeeding as amended. For details, refer to section 3 and 8.

#### National regulations

No additional information available.

### 15.2. Chemical safety assessment

No additional information available.

## 16. SECTION 16: Other information

#### Indication of changes

Section 1 - Section 16.

#### Abbreviations and acronyms

ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
AGW	Occupational exposure limit value

ATE	Acute Toxicity Estimate according to Regulation (EC) 1272/2008 (CLP)
BAM	Federal Institute for Materials Research and Testing, Germany
BAT	Maximum permissible concentration of biological working substances.
BCF	Bio-concentration factor.
BLV	Biological limit values
BLV	Biological limit values (BGW, Austria)
BMGV	Biological Monitoring Guidance Value (EH40,UK).
BOD5	Biochemical oxygen demand within 5 days
BOD	Biochemical oxygen demand
bw	Body weight.
calcd.	Calculated
CAS	Chemical Abstract Service.
CEN	European Committee for Standardization
CESIO	European Committee on Organic Surfactants and their Intermediates.
COD	Chemical oxygen demand
CLP	Classification, Labeling and Packaging REGULATION (EC) No 1272/2008 on classification, labeling and packaging of substances and mixtures.
CMR	Carcinogenic, Mutagenic or Reproduction Toxic Substances
CSA	Chemical safety assessment
CSR	Chemical Safety Report.
DMEL	Derived Minimum Effect Level.
DNEL	Derived no effect level
EAC	European waste catalogue
EC	European community
EC50	Effective concentration
EINECS	European Inventory of Existing Commercial Chemical Substances.
ELINCS	European List of Notified Chemical Substances.
EN	European norm.
ERC	ERC (Environmental Release category)
EU	European Union
GLP	Good Laboratory Practice.
GHS	Globally Harmonized System of Classification and Labeling of Chemicals.
GW/VL	Occupational exposure limit value.
GW-kw/VL-cd	Occupational exposure limit value - short term.
GW-M/VL-M	Occupational exposure limit value – "Ceiling".
IATA	International Air Transport Association
IBC code	International Bulk Chemical (Code) (International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk).
ICAO	International Civil Aviation Organization
IC50	Inhibition Concentration 50%.
IECSC	Inventory of Existing Chemical Substances in China.
IMDG	International Maritime Dangerous Goods
ISO	International Standards Organization.
IUPAC	International Union of Pure and Applied Chemistry
LC50	Lethal Concentration 50%.
LCLo	Lowest published lethal concentration.

LD50	Lethal Dose 50%.
LOAEL	Lowest Observed Adverse Effect Level
LOEC	Lowest observable effect concentration.
LOEL	Lowest observable effect level.
LQ	Limited quantities
TRK-Kzw	Threshold limit value - Short-term exposure limit / Technical reference concentration - short-time value, Austria.
MAK-Mow	Maximum allowable workplace concentration – instantaneous value, Austria.
MAK-Tmw, TRK-Tmw	Maximum allowable workplace concentration – daily mean value / Technical standard concentration – daily mean value, Austria.
MAK	Threshold limit values Germany.
MARPOL	International Convention for the Prevention of Pollution from Ships.
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
NOEL	no-observed-effect level
OECD	Organisation for Economic Co-operation and Development
OEL	Occupational Exposure Limits
PBT	Persistent Bioaccumulative Toxic
PC (Chemical product category)	PC (Chemical product category)
PNEC	Predicted No-Effect Concentration
POCP	Photochemical ozone creation potential.
POP	Persistent Organic Pollutants
PPE	Personal protective equipment
Process category	Process category
REACH	Registration, Evaluation and Authorization of Chemicals (REGULATION (EC) No 1907/2006 concerning Registration, Evaluation Authorization and Restriction of Chemicals).
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SCL	Specific concentration limit.
STEL	Short-term Exposure Limit
STP	Sewage treatment plant
SU (Sector of use)	SU (Sector of use)
SVHC	Substance of Very High Concern.
TLV	Threshold Limit Value
TRGS	Technical Rules for Hazardous Substances (German Standard).
TWA	Time Weighted Average
UVCB	Substances of Unknown or Variable composition, Complex reaction products or Biological materials
VbF	Ordinance on Flammable Liquids, Austria
VOC	Volatile organic compounds
vPvB	Very Persistent and Very Bioaccumulative
WEL-TWA	Workplace Exposure Limit-Long term exposure limit (8-hour TWA(=time weighted average)reference period).
WEL-STEL	Workplace Exposure Limit-Short term exposure limit (15-minute reference period).

**Data sources**

REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006..



**Training advice**

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

*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:** Hardener H

**Ford Int. Ref. No.:** 183190

REVISION DATE: 10.12.2019

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**Involved Products:**

<b>Finiscode</b>	<b>Part number</b>	<b>Container Size:</b>
1	9U7J M2G322 BA	4.3 ml
<b>Part of Kit:</b> 2 053 962	FU7J T03863 EB	Windscreen Adhesive Kit - 2 Component H2