

## Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 20.10.2023

Version number 1

Revision: 20.10.2023

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

#### 1.1 Product identifier

Trade name **Aqua H-484-HARDENER**

Article number: 5500

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

Product category PC9a Coatings and paints, thinners, paint removers

#### Application of the substance / the mixture

Wood coating

Hardening agent/ Curing agent

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

##### Manufacturer/Supplier:

Remmers GmbH

Bernhard-Remmers-Str. 13

D-49624 Lönningen / Germany

Tel.: +49(0)5432/83-0

Fax: +49(0)5432/3985

Remmers (UK) Limited

Unit 4 , Lloyds Court

Manor Royal, Crawley – West Sussex RH10 9QU

fon +44 (0) 1293 594 010

fax +44 (0) 1293 594 037

##### Information department:

Product Safety department: Phone: +44 (0) 1293 594 010

Email: sales@remmers.co.ukk

#### 1.4 Emergency telephone number:

National Poisons Information Service (NPIS):

In England and Wales: NHS 111 - dial 111

In Scotland: NHS 24 - dial 111

24h-Transport Emergency Contact Phone Number:

within USA and Canada: 1-800-424-9300

outside USA and Canada: 001-703-527-3887

### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture

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

Flam. Liq. 3 H226 Flammable liquid and vapour.

Acute Tox. 4 H332 Harmful if inhaled.

Skin Sens. 1 H317 May cause an allergic skin reaction.

STOT SE 3 H335-H336 May cause respiratory irritation. May cause drowsiness or dizziness.

Aquatic Chronic 3 H412 Harmful to aquatic life with long lasting effects.

#### 2.2 Label elements

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

The product is classified and labelled according to the GB CLP regulation.

##### Hazard pictograms



GHS02 GHS07

Signal word Warning

##### Hazard-determining components of labelling:

aliphatic polyisocyanate

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2-methoxy-1-methylethyl acetate

**Hazard statements**

H226 Flammable liquid and vapour.

H332 Harmful if inhaled.

H317 May cause an allergic skin reaction.

H335-H336 May cause respiratory irritation. May cause drowsiness or dizziness.

H412 Harmful to aquatic life with long lasting effects.

**Precautionary statements**P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources.  
No smoking.

P261 Avoid breathing mist/vapours/spray.

P273 Avoid release to the environment.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

**Additional information:**

EUH204 Contains isocyanates. May produce an allergic reaction.

**2.3 Other hazards****Results of PBT and vPvB assessment****PBT:** Not applicable.**vPvB:** Not applicable.**Determination of endocrine-disrupting properties** Not applicable.\* **SECTION 3: Composition/information on ingredients****3.2 Mixtures****Description:** Mixture of the substances listed below with harmless additions.

<b>Dangerous components [% w/w]:</b>		
CAS: 666723-27-9	aliphatic polyisocyanate Acute Tox. 4, H332; Skin Sens. 1B, H317; STOT SE 3, H335; Aquatic Chronic 3, H412, EUH204	≥70-≤85%
CAS: 108-65-6 EINECS: 203-603-9 Index number: 607-195-00-7 Reg.nr.: 01-2119475791-29-XXXX	2-methoxy-1-methylethyl acetate Flam. Liq. 3, H226; STOT SE 3, H336	≥20-<30%

**Additional information** For the wording of the listed hazard phrases refer to section 16.\* **SECTION 4: First aid measures****4.1 Description of first aid measures****General information**

Immediately remove any clothing soiled by the product.

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

**After inhalation**

Supply fresh air and call for doctor for safety reasons.

In case of unconsciousness bring patient into stable side position for transport.

**After skin contact**

Wash immediately with water and soap and rinse thoroughly.

Wash off immediately with water.

**After eye contact** Rinse opened eye for several minutes under running water.**After swallowing** Seek immediate medical advice.**4.2 Most important symptoms and effects, both acute and delayed**

No further relevant information available.

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

No further relevant information available.

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## \* SECTION 5: Firefighting measures

### 5.1 Extinguishing media

#### Suitable extinguishing agents

CO<sub>2</sub>, extinguishing powder or water jet. Fight larger fires with water jet.

**For safety reasons unsuitable extinguishing agents** Water with a full water jet.

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

Vapours are heavier than air and spread out over the ground. Ignition over greater distances is possible.

### 5.3 Advice for firefighters

**Protective equipment:** Put on breathing apparatus.

## \* SECTION 6: Accidental release measures

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

Wear protective equipment. Keep unprotected persons away.

### 6.2 Environmental precautions:

Do not allow product to reach sewage system or water bodies.

Inform responsible authorities in case product reaches bodies of water or sewage system.

### 6.3 Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Dispose of contaminated material as waste according to item 13.

Ensure adequate ventilation.

### 6.4 Reference to other sections

See Section 7 for information on safe handling

See Section 8 for information on personal protection equipment.

See Section 13 for information on disposal.

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

Ensure good ventilation/exhaust in workplaces.

Avoid the formation of aerosols.

#### Information about protection against explosions and fires:

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

### 7.2 Conditions for safe storage, including any incompatibilities

#### Storage

**Requirements to be met by storerooms and containers:** No special requirements.

**Further information about storage conditions:** Keep container tightly closed.

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

### 8.1 Control parameters

#### Components with limit values that require monitoring at the workplace:

**CAS: 108-65-6 2-methoxy-1-methylethyl acetate**

WEL	Short-term value: 548 mg/m <sup>3</sup> , 100 ppm
	Long-term value: 274 mg/m <sup>3</sup> , 50 ppm
Sk	

**Additional information:** The lists that were valid during compilation were used as a basis.

### 8.2 Exposure controls

**Appropriate engineering controls** No further data; see section 7.

#### Individual protection measures, such as personal protective equipment

##### General protective and hygienic measures

Immediately remove soiled, saturated clothing.

Wash hands before pauses and after work.

The following indication regarding the personal protective equipment are to be considered as suggestions. The selection of the necessary personal protective equipment is to be evaluated by the employer depending on the types of operations and the local circumstances. If a risk assessment on-site shows that there is no risk for employees, the personal protective equipment is not required or the amount of the PPE can be adapted accordingly.

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**Respiratory equipment:**

In case of brief exposure or low pollution load, use respiratory protection equipment with filter. In case of intensive or longer exposure, use self-contained respiratory protection equipment.

**Hand protection**

Protective gloves.

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

**Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

**Eye/face protection** Tightly sealed safety glasses.

## SECTION 9: Physical and chemical properties

**9.1 Information on basic physical and chemical properties****General Information**

<b>Physical state</b>	Fluid
<b>Colour:</b>	transparent
<b>Odour:</b>	Pungent
<b>Odour threshold:</b>	Not determined.
<b>Melting point/freezing point:</b>	Not determined
<b>Boiling point or initial boiling point and boiling range</b>	146 °C
<b>Flammability</b>	Flammable.
<b>Lower and upper explosion limit</b>	
<b>Lower:</b>	1.5 Vol %
<b>Upper:</b>	10.8 Vol %
<b>Flash point:</b>	44 °C
<b>Auto-ignition temperature:</b>	333 °C
<b>Decomposition temperature:</b>	Not determined.
<b>pH</b>	Not determined.
<b>Viscosity:</b>	
<b>Kinematic viscosity at 20 °C</b>	35 s (DIN 53211/4)
<b>dynamic:</b>	Not determined.
<b>Solubility</b>	
<b>Water:</b>	Not miscible or difficult to mix
<b>Partition coefficient n-octanol/water (log value)</b>	Not determined.
<b>Vapour pressure at 20 °C:</b>	3.4 hPa
<b>Density and/or relative density</b>	
<b>Density at 20 °C:</b>	1.1 g/cm <sup>3</sup>
<b>Relative density</b>	Not determined.
<b>Vapour density</b>	Not determined.

**9.2 Other information**

**Appearance:**

**Form:** Liquid

**Important information on protection of health and environment, and on safety.**

**Explosive properties:** Product is not explosive. However, formation of dangerous explosive vapour/air mixtures is possible.

**Solvent separation test** < 3 %  
**Organic solvents:** 28.0 %  
**VOC EU** 307.6 g/l

**Change in condition**

**Evaporation rate** Not determined.

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**Information with regard to physical hazard****classes**

<b>Explosives</b>	Void
<b>Flammable gases</b>	Void
<b>Aerosols</b>	Void
<b>Oxidising gases</b>	Void
<b>Gases under pressure</b>	Void
<b>Flammable liquids</b>	Flammable liquid and vapour.
<b>Flammable solids</b>	Void
<b>Self-reactive substances and mixtures</b>	Void
<b>Pyrophoric liquids</b>	Void
<b>Pyrophoric solids</b>	Void
<b>Self-heating substances and mixtures</b>	Void
<b>Substances and mixtures, which emit flammable gases in contact with water</b>	Void
<b>Oxidising liquids</b>	Void
<b>Oxidising solids</b>	Void
<b>Organic peroxides</b>	Void
<b>Corrosive to metals</b>	Void
<b>Desensitised explosives</b>	Void

**SECTION 10: Stability and reactivity****10.1 Reactivity** No further relevant information available.**10.2 Chemical stability****Thermal decomposition / conditions to be avoided:**

No decomposition if used according to specifications.

**10.3 Possibility of hazardous reactions** No dangerous reactions known**10.4 Conditions to avoid** No further relevant information available.**10.5 Incompatible materials:** No further relevant information available.**10.6 Hazardous decomposition products:** No dangerous decomposition products known**SECTION 11: Toxicological information****11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008****Acute toxicity:** Harmful if inhaled.**LD/LC50 values that are relevant for classification:****CAS: 666723-27-9 aliphatic polyisocyanate**

Oral	LD50	>5,000 mg/kg (rat)
Dermal	LD50	>2,000 mg/kg (rabbit)

**CAS: 108-65-6 2-methoxy-1-methylethyl acetate**

Oral	LD50	8,500 mg/kg (rat)
Inhalative	LC50/4 h	35.7 mg/l (rat)

**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.**Sensitisation:** May cause an allergic skin reaction.**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:** May cause respiratory irritation. May cause drowsiness or dizziness.**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****Endocrine disrupting properties**

None of the ingredients is listed.

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## \* SECTION 12: Ecological information

### 12.1 Toxicity

<b>Aquatic toxicity:</b>	
<b>CAS: 666723-27-9 aliphatic polyisocyanate</b>	
EC50/48h	>100 mg/l (Daphnia magna)

**12.2 Persistence and degradability** No further relevant information available.

**12.3 Bioaccumulative potential** No further relevant information available.

**12.4 Mobility in soil** No further relevant information available.

### 12.5 Results of PBT and vPvB assessment

**PBT:** Not applicable.

**vPvB:** Not applicable.

### 12.6 Endocrine disrupting properties

The product does not contain substances with endocrine disrupting properties.

### 12.7 Other adverse effects

**Remark:** Harmful to fish

### Additional ecological information:

#### General notes:

Do not allow product to reach ground water, bodies of water or sewage system.

Harmful to aquatic organisms

## \* SECTION 13: Disposal considerations

### Recommendation

Do not dispose of together with household garbage. Do not allow product to reach sewage system.

The given refuse codes are recommendations based upon the intended use of the product. Because of special use and disposal conditions at the user's, other codes may apply under other conditions.

<b>European waste catalogue</b>	
08 05 01*	waste isocyanates
08 01 11*	waste paint and varnish containing organic solvents or other hazardous substances
08 01 17*	wastes from paint or varnish removal containing organic solvents or other hazardous substances


### Uncleaned packaging:

#### Recommendation:

Disposal must be made according to official regulations.

Packaging can be reused or recycled after cleaning.

## SECTION 14: Transport information

<b>14.1 UN number or ID number</b> ADR, IMDG, IATA	UN1263
<b>14.2 UN proper shipping name</b> ADR IMDG, IATA	1263 PAINT RELATED MATERIAL PAINT RELATED MATERIAL
<b>14.3 Transport hazard class(es)</b> ADR	
	
<b>Class</b>	3 (F1) Flammable liquids.

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<b>Label</b>	3
<b>IMDG, IATA</b>	
	
<b>Class</b>	3 Flammable liquids.
<b>Label</b>	3
<b>14.4 Packing group ADR, IMDG, IATA</b>	III
<b>14.5 Environmental hazards: Marine pollutant:</b>	No
<b>14.6 Special precautions for user hazard identification number: EMS Number: Stowage Category</b>	Warning: Flammable liquids. 30 F-E, <u>S-E</u> A
<b>14.7 Maritime transport in bulk according to IMO instruments</b>	Not applicable.
<b>Transport/Additional information:</b>	
<b>ADR</b>	
<b>Limited quantities (LQ)</b>	5L
<b>Excepted quantities (EQ)</b>	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
<b>Transport category</b>	3
<b>Tunnel restriction code</b>	D/E
<b>IMDG</b>	
<b>Limited quantities (LQ)</b>	5L
<b>Excepted quantities (EQ)</b>	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
<b>UN "Model Regulation":</b>	UN 1263 PAINT RELATED MATERIAL, 3, III

## SECTION 15: Regulatory information

### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

Directive 2012/18/EU

Named dangerous substances - ANNEX I None of the ingredients is listed.

Seveso category P5c FLAMMABLE LIQUIDS

Qualifying quantity (tonnes) for the application of lower-tier requirements 5,000 t

Qualifying quantity (tonnes) for the application of upper-tier requirements 50,000 t

REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3

#### DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II

None of the ingredients is listed.

#### REGULATION (EU) 2019/1148

#### Annex I - RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))

None of the ingredients is listed.

#### Annex II - REPORTABLE EXPLOSIVES PRECURSORS

None of the ingredients is listed.

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**15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.**SECTION 16: Other information**

This data is based on our present state of knowledge. However, it does not constitute a guarantee for any specific product features and does not establish a legally valid contractual relationship. Delivery specifications are found in the respective Technical Information Sheets.

**Relevant phrases**

H226 Flammable liquid and vapour.  
H317 May cause an allergic skin reaction.  
H332 Harmful if inhaled.  
H335 May cause respiratory irritation.  
H336 May cause drowsiness or dizziness.  
H412 Harmful to aquatic life with long lasting effects.  
EUH204 Contains isocyanates. May produce an allergic reaction.

**Classification according to Regulation (EC) No 1272/2008** Calculation method**Department issuing data specification sheet:** Product Safety department / EHS**Abbreviations and acronyms:**

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)  
IMDG: International Maritime Code for Dangerous Goods  
IATA: International Air Transport Association  
GHS: Globally Harmonised System of Classification and Labelling of Chemicals  
EINECS: European Inventory of Existing Commercial Chemical Substances  
ELINCS: European List of Notified Chemical Substances  
CAS: Chemical Abstracts Service (division of the American Chemical Society)  
LC50: Lethal concentration, 50 percent  
LD50: Lethal dose, 50 percent  
PBT: Persistent, Bioaccumulative and Toxic  
vPvB: very Persistent and very Bioaccumulative  
Flam. Liq. 3: Flammable liquids – Category 3  
Acute Tox. 4: Acute toxicity – Category 4  
Skin Sens. 1: Skin sensitisation – Category 1  
Skin Sens. 1B: Skin sensitisation – Category 1B  
STOT SE 3: Specific target organ toxicity (single exposure) – Category 3  
Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3