

# SAFETY DATA SHEET

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

### 1.1. Product identifier

**Trade name**

Hardener Advanced 2K

**Product no.**

-

**REACH registration number**

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

**Relevant identified uses of the substance or mixture**

wood surfaces, indoors

**Uses advised against**

-

The full text of any mentioned and identified use categories are given in section 16

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

**Company and address**

WOCA Denmark A/S

Tværvvej 6

6640 Lunderskov

Denmark

Tel: +45 99585600

Fax: +45 99585636

**Contact person**

LFH

**E-mail**

info@ttwoodcare.com

**SDS date**

2016-09-23

**SDS Version**

4.0

### 1.4. Emergency telephone number

Use your national or local emergency number

See section 4 "First aid measures"

## SECTION 2: Hazards identification

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

Acute Tox. 4; H302

Skin Sens. 1; H317

Eye Dam. 1; H318

Muta. 2; H341

STOT RE 2 (oral); H373

Aquatic Chronic 2; H411

See full text of H-phrases in section 2.2.

### 2.2. Label elements

#### ▼ Hazard pictogram(s)



According to EC-Regulation 1907/2006 (REACH)

▼ **Signal word**

Danger

▼ **Hazard statement(s)**

Harmful if swallowed. (H302)  
 May cause an allergic skin reaction. (H317)  
 Causes serious eye damage. (H318)  
 Suspected of causing genetic defects. (H341)  
 May cause damage to organs through prolonged or repeated exposure. (H373)  
 Toxic to aquatic life with long lasting effects. (H411)

	<b>General</b>	If medical advice is needed, have product container or label at hand. (P101). Keep out of reach of children. (P102).
▼ <b>Safety statement(s)</b>	<b>Prevention</b>	Wear protective gloves/eye protection. (P280).
	<b>Response</b>	Immediately call a POISON CENTER/doctor. (P310). IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. (P305+P351+P338).
	<b>Storage</b>	-
	<b>Disposal</b>	Dispose of contents/container to an approved waste disposal plant. (P501).

▼ **Identity of the substances primarily responsible for the major health hazards**

-

▼ **2.3. Other hazards**

-

**Additional labelling**

-

**Additional warnings**

Tactile warning.

**VOC**

-

### SECTION 3: Composition/information on ingredients

▼ **3.1/3.2. Substances/Mixtures**

NAME:	2,2-Bis(3-(2-methylaziridin-1-yl)propanoyl)oxyethyl, butyl, 3-(2-methylaziridin-1-yl)propanoate
IDENTIFICATION NOS.:	CAS-no: 64265-57-2 EC-no: 264-763-3 REACH-no: 01-2119963929-15-0000
CONTENT:	95-100%
CLP CLASSIFICATION:	Acute Tox. 4, Skin Sens. 1, Eye Dam. 1, Muta. 2, STOT RE 2, Aquatic Chronic 2 H302, H317, H318, H341, H373, H411

(\*) See full text of H-phrases in chapter 16. Occupational exposure limits are listed in section 8, if these are available.

**Other informations**

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### SECTION 4: First aid measures

**4.1. Description of first aid measures**

▼ **General information**

In the case of accident: Contact a doctor or casualty department – take the label or this safety data sheet. Contact a doctor, if in doubt about the injured person's condition or if the symptoms continue. Never give an unconscious person water or similar.

**Inhalation**

Get the person into fresh air and stay with them.

**Skin contact**

Remove contaminated clothing and shoes at once. Skin that has come in contact with the material must be washed thoroughly with water and soap. Skin cleanser can be used. DO NOT use solvents or thinners.

**Eye contact**

Remove contact lenses. Flush eyes with plenty of water (20-30°C) for at least 15 minutes and continue until irritation stops. Make sure you flush under the upper and lower eyelids. Contact a doctor at once.

**Ingestion**

In the case of ingestion, contact a doctor immediately and take this safety data sheet or the label from the material with you. If the person is conscious, give them water. DO NOT try to induce vomiting, unless this is recommended by a doctor. Hold head facing down so that no vomit runs back into the mouth and throat. Prevent shock by keeping the injured person warm and calm. Give mouth-to-mouth resuscitation if breathing stops. If unconscious, roll the injured person onto side with the top leg bent at both knee and hip. Call an ambulance.

#### **Burns**

Not applicable

#### ▼ **4.2. Most important symptoms and effects, both acute and delayed**

Sensitivity effects: This product contains substances which can give an allergic reaction on contact with skin. The allergic reaction will typically set in 12-72 hours after exposure as the substance penetrates the skin and reacts with proteins in the outer skin. The body's immune system sees the chemically changed protein as a foreign body and will try to destroy it.

Irritation effects: This product contains substances which cause irritation to skin and eyes, or when inhaled. Contact with locally irritative substances can cause the area of contact to be more prone to absorb damaging substances such as allergens.

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

IF exposed or concerned:

Get immediate medical advice/attention.

#### **Information to medics**

Bring this safety data sheet.

### **SECTION 5: Firefighting measures**

#### **5.1. Extinguishing media**

Recommended: alcohol-resistant foam, carbonic acid, powder, water mist. Water jets should not be used, since they can spread the fire.

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

No special

#### **5.3. Advice for firefighters**

Wear self-contained breathing apparatus and protective clothing to prevent contact.

### **SECTION 6: Accidental release measures**

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

Avoid direct contact with spilled substances. Avoid inhalation of vapours from waste material.

#### ▼ **6.2. Environmental precautions**

Avoid discharge to lakes, streams, sewers, etc. In the event of a leakage to the surroundings, contact the local environmental authorities. Consider putting up waste collecting trays/basins to prevent leakage to the surroundings.

#### **6.3. Methods and material for containment and cleaning up**

Use sand, sawdust, earth, vermiculite, diatomaceous earth to contain and collect non-combustible absorbent materials and place in container for disposal, according to local regulations. Cleaning should be done as far as possible using normal cleaning agents. Solvents should be avoided.

#### **6.4. Reference to other sections**

See section on "Disposal considerations" with regard to the handling of waste. See section on 'Exposure controls/personal protection' for protective measures.

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

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

Smoking, consumption of food or liquid, and storage of tobacco, food or liquids are not allowed in the workrooms. Consider putting up waste collecting trays/basins to prevent leakage to the surroundings. See section on 'Exposure controls/personal protection' for information on personal protection. Avoid direct contact with the product.

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

Always store in containers of the same material as the original. Containers that have been opened must be carefully resealed and kept upright to prevent leakage.

#### ▼ **Storage temperature**

Store frost-free.

### 7.3. Specific end use(s)

This product should only be used for applications described in Section 1.2

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### ▼ OEL

No substances listed.

#### ▼ DNEL / PNEC

DNEL (2,2-Bis,3-,2-methylaziridin-1-yl,propanoyl,oxy,methyl,butyl,3-,2-methylaziridin-1-yl,propanoate): 1,62 mg/m<sup>3</sup>  
Exposure: Inhalation  
Duration of Exposure: Long term – Systemic effects - Workers

DNEL (2,2-Bis,3-,2-methylaziridin-1-yl,propanoyl,oxy,methyl,butyl,3-,2-methylaziridin-1-yl,propanoate): 8,4 mg/m<sup>3</sup>  
Exposure: Inhalation  
Duration of Exposure: Short term – Systemic effects - Workers

DNEL (2,2-Bis,3-,2-methylaziridin-1-yl,propanoyl,oxy,methyl,butyl,3-,2-methylaziridin-1-yl,propanoate): 11,1 mg/m<sup>3</sup>  
Exposure: Inhalation  
Duration of Exposure: Short term – Local effects - Workers

DNEL (2,2-Bis,3-,2-methylaziridin-1-yl,propanoyl,oxy,methyl,butyl,3-,2-methylaziridin-1-yl,propanoate): 0,023 mg/kg bw/d  
Exposure: Dermal  
Duration of Exposure: Long term – Systemic effects - Workers

DNEL (2,2-Bis,3-,2-methylaziridin-1-yl,propanoyl,oxy,methyl,butyl,3-,2-methylaziridin-1-yl,propanoate): 0,417 mg/cm<sup>2</sup>  
Exposure: Dermal  
Duration of Exposure: Short term – Local effects - Workers

DNEL (2,2-Bis,3-,2-methylaziridin-1-yl,propanoyl,oxy,methyl,butyl,3-,2-methylaziridin-1-yl,propanoate): 0,972 mg/m<sup>3</sup>  
Exposure: Inhalation  
Duration of Exposure: Long term – Systemic effects - General population

DNEL (2,2-Bis,3-,2-methylaziridin-1-yl,propanoyl,oxy,methyl,butyl,3-,2-methylaziridin-1-yl,propanoate): 0,278 mg/kg bw/d  
Exposure: Oral  
Duration of Exposure: Long term – Systemic effects - General population  
PNEC (2,2-Bis,3-,2-methylaziridin-1-yl,propanoyl,oxy,methyl,butyl,3-,2-methylaziridin-1-yl,propanoate): 5.5 µg/l  
Exposure: Freshwater

PNEC (2,2-Bis,3-,2-methylaziridin-1-yl,propanoyl,oxy,methyl,butyl,3-,2-methylaziridin-1-yl,propanoate): 0.55 µg/l  
Exposure: Marine water

PNEC (2,2-Bis,3-,2-methylaziridin-1-yl,propanoyl,oxy,methyl,butyl,3-,2-methylaziridin-1-yl,propanoate): 10 mg/l  
Exposure: Sewage Treatment Plant

PNEC (2,2-Bis,3-,2-methylaziridin-1-yl,propanoyl,oxy,methyl,butyl,3-,2-methylaziridin-1-yl,propanoate): 3.315 µg/kg  
wwt  
Exposure: Soil

PNEC (2,2-Bis,3-,2-methylaziridin-1-yl,propanoyl,oxy,methyl,butyl,3-,2-methylaziridin-1-yl,propanoate): 0,0066 mg/kg dwt  
Exposure: Freshwater sediment

PNEC (2,2-Bis,3-,2-methylaziridin-1-yl,propanoyl,oxy,methyl,butyl,3-,2-methylaziridin-1-yl,propanoate): 0,003 mg/kg dwt  
Exposure: Marine water sediment

PNEC (2,2-Bis,3-,2-methylaziridin-1-yl,propanoyl,oxy,methyl,butyl,3-,2-methylaziridin-1-yl,propanoate): 55 µg/l  
Exposure: Intermittent release

### 8.2. Exposure controls

No control is necessary if the product is used in a normal way.

#### General recommendations

▼ Observe general occupational hygiene.

#### Exposure scenarios

If there is an appendix to this safety data sheet, the indicated exposure scenarios must be complied.

#### Exposure limits

There are no maximum exposure limits for the substances contained in this product.

#### ▼ Appropriate technical measures

Do not recirculate outlet air that contain the substances. Take ordinary precautions when using the product.  
Avoid inhalation of gas or dust.

### Hygiene measures

Whenever you take a break in using this product and when you have finished using it, all exposed areas of the body must be washed. Always wash hands, forearms and face.

### Measures to avoid environmental exposure

Keep damming materials near the workplace. If possible collect spillage during work.

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



#### ▼ Generally

Use only CE marked protective equipment.

#### Respiratory Equipment

No specific requirements.

#### Skin protection

Special work clothing should be used. When working with this product for a long period of time, use a protective suit.

#### ▼ Hand protection

Recommended: Nitrile rubber. See the manufacturer's instructions

#### ▼ Eye protection

Use safety glasses with a side shield.

## SECTION 9: Physical and chemical properties

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

Form	Liquid
Colour	Pale yellow
Odour	No data available.
pH	No data available.
Viscosity	No data available.
Density (g/cm <sup>3</sup> )	1,08

### ▼ Phase changes

Melting point (°C)	No data available.
Boiling point (°C)	No data available.
Vapour pressure	No data available.

### ▼ Data on fire and explosion hazards

Flashpoint (°C)	>100
Ignition (°C)	No data available.
Self ignition (°C)	No data available.
Explosion limits (Vol %)	No data available.

### ▼ Solubility

Solubility in water	Soluble
n-octanol/water coefficient	No data available.

### ▼ 9.2. Other information

Solubility in fat (g/L)	No data available.
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## SECTION 10: Stability and reactivity

### 10.1. Reactivity

No data available

### 10.2. Chemical stability

The product is stable under the conditions, noted in the section on "Handling and storage".

### 10.3. Possibility of hazardous reactions

No special

### 10.4. Conditions to avoid

Do not expose to heat (e.g. sunlight), because it can lead to excess pressure.

### 10.5. Incompatible materials

According to EC-Regulation 1907/2006 (REACH)

Strong acids, strong bases, strong oxidizing agents, and strong reductants agents.

#### 10.6. Hazardous decomposition products

The product is not degraded when used as specified in section 1.

### SECTION 11: Toxicological information

#### 11.1. Information on toxicological effects

##### ▼ Acute toxicity

Substance	Species	Test	Route of exposure	Result
2,2-Bis,3-,2-methylaziridin-1-...	Rat	LD50	Oral	2038mg/kg

##### ▼ Skin corrosion/irritation

No data available.

##### Serious eye damage/irritation

Causes serious eye damage.

##### ▼ Respiratory or skin sensitisation

May cause an allergic skin reaction.

##### Germ cell mutagenicity

Suspected of causing genetic defects.

##### Carcinogenicity

No data available.

##### Reproductive toxicity

No data available.

##### STOT-single exposure

No data available.

##### ▼ STOT-repeated exposure

May cause damage to organs.

##### Aspiration hazard

No data available.

##### ▼ Long term effects

Irritation effects: This product contains substances which cause irritation to skin and eyes, or when inhaled. Contact with locally irritative substances can cause the area of contact to be more prone to absorb damaging substances such as allergens.

### SECTION 12: Ecological information

#### ▼ 12.1. Toxicity

Substance	Species	Test	Test duration	Result
2,2-Bis,3-,2-methylaziridin-1-...	Algae	EC50	72	3,8mh/l
2,2-Bis,3-,2-methylaziridin-1-...	Daphnia	EC50	48	81mg/l
2,2-Bis,3-,2-methylaziridin-1-...	Fish	LC50	96	>100mg/l
2,2-Bis,3-,2-methylaziridin-1-...	Algae	NOEC	72	0,92mg/l
2,2-Bis,3-,2-methylaziridin-1-...	Daphnia	NOEC	48	22mg/l
2,2-Bis,3-,2-methylaziridin-1-...	Fish	NOEC	96	100mg/l

#### 12.2. Persistence and degradability

Substance	Biodegradability	Test	Result
No data available.			

#### 12.3. Bioaccumulative potential

Substance	Potential bioaccumulation	LogPow	BCF
No data available.			

#### 12.4. Mobility in soil

No data available

#### 12.5. Results of PBT and vPvB assessment

No data available

#### ▼ 12.6. Other adverse effects

This product contains ecotoxic substances which can have damaging effects on water-organisms. This product contains substances which can cause undesirable long-term effects in the water environment, due to its poor biodegradability.

### SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

The product is covered by the regulations on dangerous waste.

#### Waste

EWC code

-

#### Specific labelling

-

#### Contaminated packing

Packaging which contains leftovers from the product must be disposed of in the same way as the product.

## SECTION 14: Transport information

### 14.1 – 14.4

Not listed as dangerous goods under ADR, IMDG and IATA/ICAO regulations.

#### ▼ ADR/RID

14.1. UN number -

14.2. UN proper shipping name -

14.3. Transport hazard class(es) -

14.4. Packing group -

Notes -

Tunnel restriction code -

#### ▼ IMDG

UN-no. -

Proper Shipping Name -

Class -

PG\* -

EmS -

MP\*\* -

Hazardous constituent -

#### ▼ IATA/ICAO

UN-no. -

Proper Shipping Name -

Class -

PG\* -

### 14.5. Environmental hazards

The environmentally hazardous substance mark is not required when transported in sizes of  $\leq 5$  L or  $\leq 5$  kg

### 14.6. Special precautions for user

-

### 14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

No data available

(\*) Packing group

(\*\*) Marine pollutant

## SECTION 15: Regulatory information

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

#### ▼ Restrictions for application

People under the age of 18 must not be exposed to this product cf. Council Directive 94/33/EC. Pregnant and nursing women must not be exposed to the effects of this product. The risk, and possible technical precautions or design of the workplace to avoid such risk, must therefore be evaluated.

#### Demands for specific education

-

#### Additional information

-

### Sources

COUNCIL DIRECTIVE 92/85/EEC on the introduction of measures to encourage improvements in the safety and health at work of pregnant workers and workers who have recently given birth or are breastfeeding.

Council Directive 94/33/EC of 22 June 1994 on the protection of young people at work.

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 (CLP).  
EC regulation 1907/2006 (REACH).

### 15.2. Chemical safety assessment

No

## SECTION 16: Other information

### ▼ Full text of H-phrases as mentioned in section 3

H302 - Harmful if swallowed.

H317 - May cause an allergic skin reaction.

H318 - Causes serious eye damage.

H341 - Suspected of causing genetic defects.

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

H411 - Toxic to aquatic life with long lasting effects.

### The full text of identified uses as mentioned in section 1

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### Other symbols mentioned in section 2

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### Other

It is recommended to hand over this safety data sheet to the actual user of the product. Information in this safety data sheet cannot be used as a product specification.

The information in this safety data sheet applies only to this specific product (mentioned in section 1) and is not necessarily correct for use with other chemicals/products.

A change (in proportion to the last essential change (first cipher in SDS version)) is marked with a blue triangle.

### The safety data sheet is validated by

LFH

### Date of last essential change

#### (First cipher in SDS version)

2015-02-20

### Date of last minor change

#### (Last cipher in SDS version)

2015-02-20