



## Safety Data Sheet according to Regulation (EC)

No. 1907/2006 (REACH)

Printed 07.01.2016

revision 09.06.2015 (GB) Version 8.2

### WEICON TI Hardener

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

### 1.1. Product identifier

#### Name of product

WEICON TI Hardener

Code-Nr. 104302

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

#### Recommended intended purpose(s)

2-Component Epoxy Resin - Hardener Component

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

#### Distributor

WEICON GmbH & Co. KG

Königsberger Str. 255, DE-48157 Münster

Postbox 48045, DE-8460 Münster

Phone ++49(0)251 / 9322 - 0, Fax ++49(0)251 / 9322 - 244

E-Mail : msds@weicon.de

Internet : www.weicon.de

#### Advice

Produktsicherheit / Product-Safety-Department

Phone ++49(0)251 / 9322 - 0

E-mail (competent person):

msds@weicon.de

### 1.4. Emergency telephone number

GIZ Bonn (German, English) Tel: ++49(0)228-19 240

TRANSPORT: Consultank Lutz Harder GmbH Tel: +49(0)178

433 7434 (24h Emergency Contact)

#### Manufacturer

WEICON GmbH & Co. KG

Königsberger Str. 255, DE-48157 Münster

### 1.4. Emergency telephone number

#### Emergency advice

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Phone -

GIZ Bonn (Medizinische Auskunft in Deutsch und Englisch)

Tel: ++49(0)228-19 240

TRANSPORT: Consultank Lutz Harder GmbH Tel: +49(0)178

433 7434 (24h Emergency Contact)

## ! SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

#### ! Classification according to Regulation (EC) No 1272/2008 [CLP/GHS]

Hazard classes and Hazard categories	Hazard Statements	Classification procedure
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Acute Tox. 4		
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Skin Corr. 1A	H314	
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Skin Sens. 1A	H317	
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STOT RE 2	H373	
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**! Classification according to Regulation (EC) No 1272/2008 [CLP/GHS]**

Hazard classes and Hazard categories	Hazard Statements	Classification procedure
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Aquatic Chronic 2	H411	
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**Hazard Statements**

H302 + H312	Harmful if swallowed or in contact with skin.
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H373	May cause damage to organs through prolonged or repeated exposure.
H411	Toxic to aquatic life with long lasting effects.

**2.2. Label elements**

**Labelling according to Regulation (EC) No 1272/2008 [CLP/GHS]**



GHS05



GHS07



GHS08



GHS09

**! Signal word**

Danger

**Hazard Statements**

H302 + H312	Harmful if swallowed or in contact with skin.
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H373	May cause damage to organs through prolonged or repeated exposure.
H411	Toxic to aquatic life with long lasting effects.

**Precautionary Statements**

P102	Keep out of reach of children.
P260	Do not breathe vapours/spray.
P264	Wash hands thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P272	Contaminated work clothing should not be allowed out of the workplace.
P273	Avoid release to the environment.
P280	Wear protective gloves/eye protection.
P301 + P330 + P331	IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
P303 + P361 + P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P314	Get medical advice/attention if you feel unwell.
P333 + P313	If skin irritation or rash occurs: Get medical advice/attention.
P405	Store locked up.
P501	Dispose of contents/container to hazardous or special waste collection point.

**! Hazardous ingredients for labeling**

4,4'-methylenebis(cyclohexylamine), HEPA, pentacthylenehexamine

**2.3. Other hazards**

**Information pertaining to special dangers for human and environment**

Harmful in contact with skin and if swallowed.

Risk of serious damage to eyes.

**Results of PBT and vPvB assessment**

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

**! SECTION 3: Composition/ information on ingredients****3.1. Substances**

not applicable

**3.2. Mixtures****Description**

Preparation of different active substances

**! Hazardous ingredients**

CAS No	EC No	Name	[% weight]	Classification according to Regulation (EC) No 1272/2008 [CLP/GHS]
68131-73-7	268-626-9	HEPA	1 - 25	Acute Tox. 4, H312 / Acute Tox. 4, H302 / Skin Corr. 1B, H314 / Skin Sens. 1, H317 / Aquatic Acute 1, H400 / Aquatic Chronic 1, H410
4067-16-7	223-775-9	pentacthylenehexamine	1 - 25	Skin Corr. 1B, H314 / Skin Sens. 1, H317 / Aquatic Acute 1, H400 / Aquatic Chronic 1, H410
1761-71-3	217-168-8	4,4'-methylenebis(cyclohexylamine)	25 - 50	Acute Tox. 4, H302 / Skin Corr. 1A, H314 / Skin Sens. 1, H317 / STOT RE 2, H373 / Aquatic Chronic 2, H411

**! SECTION 4: First aid measures****4.1. Description of first aid measures****General information**

Remove contaminated soaked clothing immediately.

**In case of inhalation**

Remove the casualty into fresh air and keep him immobile.

In case of inhalation of fumes symptoms of poisoning may occur after hours, medical treatment is necessary.

Seek medical treatment immediately.

**In case of skin contact**

In case of contact with skin wash off immediately with soap and water.

Seek medical treatment immediately.

**In case of eye contact**

After eye contact, rinse opened eye for 15 minutes under running water. Transfer to hospital for specialist examination.

**In case of ingestion**

Do not induce vomiting.

Call for a doctor immediately.

Give water to drink in small sips.

Rinse out mouth thoroughly with water.

**4.2. Most important symptoms and effects, both acute and delayed****! Physician's information / possible symptoms**

Allergic symptoms

Skin burns

Nausea

Gastrointestinal complaints



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**Physician's information / possible dangers**

allergic reactions

Causes serious eye damage.

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

**Treatment (Advice to doctor)**

Keep under medical supervision for at least 48 hours.

Symptoms may not occur until several hours.

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**SECTION 5: Firefighting measures**

**5.1. Extinguishing media**

**Suitable extinguishing media**

Product does not burn, fire-extinguishing activities according to surrounding.

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

In case of fire formation of dangerous gases possible.

Nitrogen oxides (NO<sub>x</sub>)

Carbon monoxide (CO)

Carbon dioxide (CO<sub>2</sub>)

**5.3. Advice for firefighters**

**Special protective equipment for fire-fighters**

Fire-fighting operations, rescue and clearing work under effect of combustion and smoulder gases just may be done with breathing apparatus.

Do not inhale explosion and/or combustion gases.

**Additional information**

Fire residues and contaminated firefighting water must be disposed of in accordance with the local regulations.

Collect contaminated firefighting water separately, must not be discharged into the drains.

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**SECTION 6: Accidental release measures**

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

**For non-emergency personnel**

Ensure adequate ventilation.

Use personal protective clothing.

Use breathing apparatus if exposed to vapours/dust/aerosol.

**6.2. Environmental precautions**

Inform pollution control authorities if product gets into the sewerage systems or open waters.

Do not discharge into the drains/surface waters/groundwater.

Do not discharge into the subsoil/soil.

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

Avoid dust formation.

Take up with absorbent material (e.g. sand, kieselguhr, acid binder, general-purpose binder, sawdust).

After taking up the material dispose according to regulation.

**6.4. Reference to other sections**

Safe handling: see section 7

Disposal: see section 13

Personal protection equipment: see section 8



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## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

#### Advice on safe handling

Care for thoroughly room ventilation, if necessary use in well ventilated area with local exhaust ventilation at workplace.

Open and handle container with care!

Take the usual precautions when handling with chemicals.

#### General protective measures

Avoid contact with eyes and skin

Do not inhale gases/vapours/aerosols.

#### Hygiene measures

At work do not eat, drink and smoke.

Remove soiled or soaked clothing immediately.

Wash soiled clothing immediately.

#### Advice on protection against fire and explosion

Pay attention to general rules of internal fire prevention.

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

#### Requirements for storage rooms and vessels

Keep in closed original container.

#### Advice on storage compatibility

Do not store with acids or alkalis.

Do not store together with animal feedstuffs.

Do not store together with food.

Do not store together with oxidizing agents.

#### Further information on storage conditions

Keep container tightly closed and store at cool and aired place.

Protect from heat and direct solar radiation.

Do not keep at temperatures above 30°C.

### 7.3. Specific end use(s)

#### Recommendation(s) for intended use

See section 1.2

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## ! SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### Additional advice

The statutory local and national regulations have to be observed.

### 8.2. Exposure controls

#### Respiratory protection

If ventilation insufficient, wear respiratory protection.

Selection of the appropriate filter type depends on the quantity and chemicals handled at the workplace. Contact supplier of respiratory protective equipment or more information about filter properties.

Short-term: filter apparatus, filter AX/P2, otherwise environment-independent breathing apparatus.

#### Hand protection

In the cases of special applications, it is recommended to check the chemical resistance with the manufacturer of the gloves.

Chemical protective gloves must be chosen carefully in view of their design and depending on the dependence on the concentration and amounts of dangerous goods used in the specific working tasks.

Glove material specification [make/type, thickness, permeation time/life, wetting resistance]: butyl rubber, 0,7mm; 480min

**Eye protection**

tightly fitting goggles

Face shield

**Other protection measures**

protective clothing

**Appropriate engineering controls**

Care for thoroughly room ventilation, if necessary use in well ventilated area with local exhaust ventilation at workplace.

**! SECTION 9: Physical and chemical properties****9.1. Information on basic physical and chemical properties****Appearance**

pasty

**Colour**

white

**Odour**

unpleasant

**Odour threshold**

not determined

**Important health, safety and environmental information**

	Value	Temperature	at	Method	Remark
<b>pH value</b>	not determined				
<b>boiling point</b>	not determined				
<b>melting point</b>	not determined				
<b>Flash point</b>	not applicable				
<b>Vapourisation rate</b>	not determined				
<b>Flammable (solid)</b>	not determined				
<b>Flammability (gas)</b>	not determined				
<b>Ignition temperature</b>	not determined				
<b>Self ignition temperature</b>	not applicable				
<b>Lower explosion limit</b>	not determined				
<b>Upper explosion limit</b>	not determined				
<b>Vapour pressure</b>	not determined				
<b>Relative density</b>	ca. 1,45 - 1,55 g/cm <sup>3</sup>	20 °C			
<b>Vapour density</b>	not determined				
<b>Solubility in water</b>					insoluble
<b>Solubility/other</b>	not determined				
<b>Partition coefficient n-octanol/water (log P O/W)</b>	not determined				



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	Value	Temperature	at	Method	Remark
<b>Decomposition temperature</b>	not determined				
<b>Viscosity</b>					pasty
<b>Oxidising properties</b>	No information available.				
<b>Explosive properties</b>	not determined				
<b>9.2. Other information</b>	No information available.				

**! SECTION 10: Stability and reactivity****10.1. Reactivity**

No information available.

**10.2. Chemical stability**

No information available.

**10.3. Possibility of hazardous reactions**

Reactions with strong acids and alkalies.

Reactions with oxidising agents.

**10.4. Conditions to avoid**

Keep away from heat.

**10.5. Incompatible materials****Substances to avoid**

Alkali (lye)

Acid

Oxidising agent

**10.6. Hazardous decomposition products**

Gases/vapours, toxic

Carbon monoxide and carbon dioxide.

Nitrous oxides (NO<sub>x</sub>)**Thermal decomposition**

Remark No decomposition if used as directed.

**! SECTION 11: Toxicological information****11.1. Information on toxicological effects****Acute toxicity/Irritation/Sensitization**

	Value/Validation	Species	Method	Remark
<b>LD50 acute oral</b>	625 mg/kg	rat		CAS: 1761-71-3
<b>LD50 acute dermal</b>	2110 mg/kg	rabbit		CAS: 1761-71-3



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	Value/Validation	Species	Method	Remark
<b>Skin irritation</b>	corrosive			
<b>Eye irritation</b>	corrosive			
<b>Skin sensitization</b>	sensitizing			

**Experiences made from practice**

Risk of strong health injuries in case of long-term exposition.

Corrosive effect on skin and mucous membrane.

Sensitization through skin contact possible.

Causes corrosions.

Product may cause irreversible eye injuries.

**Additional information**

The product is to be handled with the caution usual with chemicals.

Other hazardous properties may not be excluded.

The product has not been tested. The information is derived from the properties of the individual components.

**! SECTION 12: Ecological information****12.1. Toxicity****Ecotoxicological effects**

	Value	Species	Method	Validation
<b>Fish</b>	LC50 180 mg/l (96 h)	Fish		CAS: 4067-16-7
<b>Daphnia</b>	EC 50 6,84 mg/l (48 h)	Daphnia magna		CAS: 1761-71-3

**12.2. Persistence and degradability**

	Elimination rate	Method of analysis	Method	Validation
<b>Biological degradability</b>				degradable

**12.3. Bioaccumulative potential**

The product has not been tested. Because of the product's consistency and low solubility in water bioavailability is not likely.

**12.4. Mobility in soil**

No information available.

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

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

**12.6. Other adverse effects****General regulation**

Toxic to aquatic life with long lasting effects.

Do not allow uncontrolled leakage of product into the environment.

Product is not allowed to be discharged into the ground water or aquatic environment.

Product is not allowed to be discharged into aquatic environment, drains or sewage treatment plants.

The ecotoxic effect of the product has not been tested. The information on this is given on the basis of details in the literature.





## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

**Waste code No.**

08 04 09\*

**Name of waste**

waste adhesives and sealants containing organic solvents or other hazardous substances

15 01 10\*

packaging containing residues of or contaminated by hazardous substances

Wastes marked with an asterisk are considered to be hazardous waste pursuant to Directive 2008/98/EC on hazardous waste.

**Recommendations for the product**

Remove in accordance with local official regulations.

**Recommendations for packaging**

Dispose of according to the local waste regulations.

**General information**

Assignment to a waste code number / waste identification according to the EWC is to be carried out on a sector or process-specific basis.

## ! SECTION 14: Transport information

	ADR/RID	IMDG	IATA-DGR
<b>14.1. UN number</b>	2735	2735	2735
<b>14.2. UN proper shipping name</b>	AMINES, LIQUID, CORROSIVE, N.O.S. (4,4'-Methylenbis(cyclohexylamin) Mischung)	AMINES, LIQUID, CORROSIVE, N.O.S. (4,4'-Methylenbis(cyclohexylamin) Mischung)	Amines, liquid, corrosive, n.o.s. (4,4'-Methylenbis(cyclohexylamin) Mischung)
<b>14.3. Transport hazard class(es)</b>	8	8	8
<b>14.4. Packing group</b>	II	II	II
<b>14.5. Environmental hazards</b>	Yes	Yes	Yes

**14.6. Special precautions for user**

No information available.

**14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

not applicable

**Land and inland navigation transport ADR/RID**

Hazard label(s) 8

tunnel restriction code E

Classification code C7

## ! SECTION 15: Regulatory information

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

VOC content 0 %



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### 15.2. Chemical Safety Assessment

Chemical safety assessments for substances in this mixture were not carried out.

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## SECTION 16: Other information

### Recommended uses and restrictions

National and local regulations concerning chemicals shall be observed.

For industrial use only.

### Further information

Each user is responsible for the implementation of the national special regulations.

The information contained herein is based on the state of our knowledge. It characterizes the product with regard to the appropriate safety precautions. It does not represent a guarantee of the properties of the product.

Please observe the following disclaimer! --- Our safety data sheets have been compiled according to effective EU-directives, WITHOUT taking into account the special national directives concerning the handling of hazardous substances.

Indication of changes: "!" = Data changed compared with the previous version. Previous version: 8.1

H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H373	May cause damage to organs (or state all organs affected, if known) through prolonged or repeated exposure (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard).
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.