

**! 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  
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  
Fax : +49(0)251 / 9322 - 244  
E-mail (competent person):  
msds@weicon.de

**1.4. Emergency telephone number**

EMERGENCY CONTACT - UK, UAE, South Africa (24h): Tel:  
++44 1865 407333 (English)  
TRANSPORT EMERGENCY CONTACT - UK, UAE, South  
Africa (24h): Tel: ++44 1865 407333 (English)

**Manufacturer**

WEICON GmbH & Co. KG  
Königsberger Str. 255, DE-48157 Münster

**1.4. Emergency telephone number**

GIFTNOTRUF/TRANSPORTNOTRUF - Deutschland (24h):  
Tel: ++49 69 222 25285 (Deutsch, Englisch)

**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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<b>Acute Tox. 4</b>		
<b>Skin Corr. 1A</b>	<b>H314</b>	
<b>Skin Sens. 1A</b>	<b>H317</b>	
<b>STOT RE 2</b>	<b>H373</b>	
<b>Aquatic Chronic 2</b>	<b>H411</b>	

**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. 1B, H314 / Skin Sens. 1, H317 / STOT RE 2, H373 / Aquatic Chronic 2, H411

**REACH**

CAS No	Name	REACH registration number
68131-73-7	HEPA	01-2119485823-28
4067-16-7	pentacthylenehexamine	01-2119485826-22
1761-71-3	4,4'-methylenebis(cyclohexylamine)	01-2119541673-38

**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



## ! 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

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### DNEL-/PNEC-values

#### DNEL worker

CAS No	Substance name	Value	Code	Remark
4067-16-7	pentachthylenhexamine	8550 mg/m <sup>3</sup>	DNEL long-term inhalative (systemic)	
		0,044 mg/cm <sup>2</sup>	DNEL acute dermal, short-term (local)	

#### 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.

**WEICON TI Hardener**

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				



	Value	Temperature	at	Method	Remark
<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				
<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 (NOx)

### 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>	300 - 2000 mg/kg			ATEmix
<b>LD50 acute dermal</b>	1000 - 2000 mg/kg			ATEmix
<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.	Name of waste
08 04 09*	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
14.1. UN number	2735	2735	2735
14.2. UN proper shipping name	AMINES, LIQUID, CORROSIVE, N.O.S. (4,4'-Methylenbis(cyclohexylamin) Mixture)	AMINES, LIQUID, CORROSIVE, N.O.S. (4,4'-Methylenbis(cyclohexylamin) Mixture)	Amines, liquid, corrosive, n.o.s. (4,4'-Methylenbis(cyclohexylamin) Mixture)
14.3. Transport hazard class(es)	8	8	8
14.4. Packing group	II	II	II
14.5. Environmental hazards	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



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## ! SECTION 15: Regulatory information

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

#### VOC standard

VOC content 0 %

### 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: 8.4

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.