

**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1. Product identifier**

**Name of product** WEICON ST Hardener  
Code-Nr. 104102

**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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Skin Corr. 1B	H314
Skin Sens. 1	H317
Aquatic Chronic 2	H411

**Hazard Statements**

H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
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



GHS09

**Signal word**

Danger

**Hazard Statements**

H314 Causes severe skin burns and eye damage.

H317 May cause an allergic skin reaction.

H411 Toxic to aquatic life with long lasting effects.

**Precautionary Statements**

P102 Keep out of reach of children.

P260 Do not breathe vapours/spray.

P271 Use only outdoors or in a well-ventilated area.

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.

P304 + P341 IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTER or doctor/physician.

P333 + P313 If skin irritation or rash occurs: Get medical advice/attention.

P337 + P313 If eye irritation persists: Get medical advice/attention.

P391 Collect spillage.

P405 Store locked up.

P501 Dispose of contents/container to hazardous or special waste collection point.

**! Hazardous ingredients for labeling**

2,4,6-tris(dimethylaminomethyl)phenol, Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine, HEPA, pentachylenhexamine, tetraethylenepentamine

**2.3. Other hazards****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**

Hardener for a 2-component epoxy adhesive (formulated polyaminoamide containing 3-aminopropyl dimethylamine).



Safety Data Sheet according to Regulation (EC)  
No. 1907/2006 (REACH)

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**WEICON ST Hardener**

**Hazardous ingredients**

CAS No	EC No	Name	[% weight]	Classification according to Regulation (EC) No 1272/2008 [CLP/GHS]
90-72-2	202-013-9	2,4,6-tris(dimethylaminomethyl)phenol	1 - 25	Acute Tox. 4, H302 / Eye Irrit. 2, H319 / Skin Irrit. 2, H315
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
112-57-2	203-986-2	tetraethylenepentamine	1 - 25	Acute Tox. 4, H312 / Acute Tox. 4, H302 / Skin Corr. 1B, H314 / Skin Sens. 1, H317 / Aquatic Chronic 2, H411
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
157707-73-8	500-382-3	Fatty acids, C18-unsatd., dimers, oligomeric reaction products with fatty acids, C16-18 and C18-unsatd., branched and linear, tetraethylenepentamine and triethylenetetramine	1 - 25	Eye Dam. 1, H318
68082-29-1	500-191-5	Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine	1 - 25	Eye Dam. 1, H318 / Aquatic Chronic 2, H411 / Skin Irrit. 2, H315 / Skin Sens. 1, H317

**REACH**

CAS No	Name	REACH registration number
90-72-2	2,4,6-tris(dimethylaminomethyl)phenol	01-2119560597-27
68131-73-7	HEPA	01-2119485823-28
112-57-2	tetraethylenepentamine	01-2119487290-37
4067-16-7	pentacthylenehexamine	01-2119485826-22
157707-73-8	Fatty acids, C18-unsatd., dimers, oligomeric reaction products with fatty acids, C16-18 and C18-unsatd., branched and linear, tetraethylenepentamine and triethylenetetramine	Polymer
68082-29-1	Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine	01-2119972320-44

**SECTION 4: First aid measures**

**4.1. Description of first aid measures**

**General information**

Remove contaminated soaked clothing immediately and dispose it safely.

**In case of inhalation**

Remove the casualty into fresh air and keep him immobile.

In the event of symptoms refer for medical treatment.

**In case of skin contact**

In case of contact with skin wash off 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.



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

**Physician's information / possible symptoms**

vomiting  
Respiratory complaints  
Allergic symptoms  
Skin burns

**Physician's information / possible dangers**

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.

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**SECTION 5: Firefighting measures**

**5.1. Extinguishing media**

**Suitable extinguishing media**

Foam  
Dry fire-extinguishing substance  
Carbon dioxide  
Water spray jet

**Unsuitable extinguishing media**

Full water jet

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

In case of fire formation of dangerous gases possible.

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.  
Keep away sources of ignition.  
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**

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

Ventilate area concerned

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!

**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 hands before breaks and after work.

**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 alkalies.

Do not store together with animal feedstuffs.

Do not store together with food.

Do not store together with oxidizing agents.

Do not store together with metals.

**Further information on storage conditions**

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

Protect from heat and direct solar radiation.

**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****DNEL-/PNEC-values****DNEL worker**

CAS No	Substance name	Value	Code	Remark
4067-16-7	pentachylenhexamine	8550 mg/m <sup>3</sup>	DNEL long-term inhalative (systemic)	



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## WEICON ST Hardener

### DNEL-/PNEC-values (continued)

CAS No	Substance name	Value	Code	Remark
		0,044 mg/cm <sup>2</sup>	DNEL acute dermal, short-term (local)	
68082-29-1	Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine	1,1 mg/kg bw/day	DNEL acute dermal, short-term (local)	
		3,9 mg/m <sup>3</sup>	DNEL acute inhalative (local)	
90-72-2	2,4,6-tris(dimethylaminomethyl)phenol	0,31 mg/m <sup>3</sup>	DNEL long-term inhalative (systemic)	

### PNEC

CAS No	Substance name	Value	Code	Remark
90-72-2	2,4,6-tris(dimethylaminomethyl)phenol	0,2 mg/l	PNEC sewage treatment plant (STP)	
		0,084 mg/l	PNEC aquatic, freshwater	
		0,0084 mg/l	PNEC aquatic, marine water	

### 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, combination filter K-P2

#### 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

#### Other protection measures

protective clothing

#### Appropriate engineering controls

Sufficient ventilation and exhaustion.

## ! SECTION 9: Physical and chemical properties

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

#### Appearance

pasty

#### Colour

light grey

#### Odour

unpleasant

#### Odour threshold



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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>	> 100 °C				
<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>					The product is not self-igniting.
<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. 1,55 - 1,65 g/cm <sup>3</sup>	20 °C			
<b>Vapour density</b>	not determined				
<b>Solubility in water</b>					No or low immiscibility
<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>	200000 mPa*s	25 °C			

**Oxidising properties**

No information available.

**Explosive properties**

no

**9.2. Other information**

No information available.



## ! SECTION 10: Stability and reactivity

### 10.1. Reactivity

No information available.

### 10.2. Chemical stability

The product is chemically stable under recommended conditions of storage, use and temperature.

### 10.3. Possibility of hazardous reactions

Reactions with acids, alkalies and oxidising agents.

Reactions with Metals.

### 10.4. Conditions to avoid

Keep away from heat.

### 10.5. Incompatible materials

#### Substances to avoid

Alkali (lye)

Acid

Oxidising agent

Metal, Metal-Salts

### 10.6. Hazardous decomposition products

Carbon monoxide and carbon dioxide.

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

Toxic gases/vapours

### 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>	1200 mg/kg	rat		CAS: 90-72-2
<b>LD50 acute dermal</b>	1280 mg/kg	rat		CAS: 90-72-2
<b>LC50 acute inhalation</b>	320 mg/kg ()	mouse		CAS: 112-57-2
<b>Skin irritation</b>	corrosive			
<b>Eye irritation</b>	corrosive			
<b>Skin sensitization</b>	sensitizing	Guinea pig		

#### Subacute Toxicity - Carcinogenicity

	Value	Species	Method	Validation
<b>Mutagenicity</b>				No experimental information on genotoxicity in vitro available.





Value	Species	Method	Validation
<b>Reproduction-Toxicity</b>			No indications of toxic effects were observed in reproduction studies in animals.
<b>Carcinogenicity</b>			No indications of carcinogenic effects are available from long-term trials.

**! Experiences made from practice**

Corrosive effect on skin and mucous membrane.

Sensitization through skin contact possible.

Causes corrosions.

**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 7,07 mg/l (96 h)	Fish		CAS: 68082-29-1
<b>Daphnia</b>	EC50 17,5 mg/l (48 h)	Daphnia magna		CAS: 4067-16-7
<b>Algae</b>	EC50 0,7 mg/l (72 h)	Green algae		CAS: 4067-16-7

**12.2. Persistence and degradability**

No information available.

**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****Recommendations for the product**

Remove in accordance with local official regulations.

Dispose of as hazardous waste.

**Recommendations for packaging**

Dispose of according to the local waste regulations.

Packaging that cannot be cleaned should be disposed of like the product.

**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**

	<b>ADR/RID</b>	<b>IMDG</b>	<b>IATA-DGR</b>
<b>14.1. UN number</b>	2735	2735	2735
<b>14.2. UN proper shipping name</b>	POLYAMINES, LIQUID, CORROSIVE, N.O.S. (Aliphatic amines, Dimer fatty acid, Polyamidoamine resins)	POLYAMINES, LIQUID, CORROSIVE, N.O.S. (Aliphatic amines, Dimer fatty acid, Polyamidoamine resins)	Polyamines, liquid, corrosive, n.o.s. (Aliphatic amines, Dimer fatty acid, Polyamidoamine resins)
<b>14.3. Transport hazard class(es)</b>	8	8	8
<b>14.4. Packing group</b>	III	III	III
<b>14.5. Environmental hazards</b>	Yes	Yes	Yes
<b>14.6. Special precautions for user</b>	No information available.		
<b>14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code</b>	not applicable		
<b>Land and inland navigation transport ADR/RID</b>	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 %

**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: 8.6

H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
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.