



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

1.1. Product identifier

Name of product

WEICON HP Hardener
Code-Nr. 103902

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

Uses advised against

Remark

Do not use for private purposes (household).

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 Eye Dam. 1	H314	
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Classification according to Regulation (EC) No 1272/2008 [CLP/GHS]

Hazard classes and Hazard categories	Hazard Statements	Classification procedure
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.
P264	Wash hands thoroughly after handling.
P272	Contaminated work clothing should not be allowed out of the workplace.
P273	Avoid release to the environment.
P280	Wear protective gloves/eye protection.
P281	Use personal protective equipment as required.
P301 + P312	IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
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 + P340	IF INHALED: Remove person to fresh air and keep 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.
P308 + P311	IF exposed or concerned: Call a POISON CENTER/doctor.
P333 + P313	If skin irritation or rash occurs: Get medical advice/attention.
P363	Wash contaminated clothing before reuse.
P501	Dispose of contents/container to hazardous or special waste collection point.

Hazardous ingredients for labeling

2-piperazin-1-ylethylamine, 3-aminomethyl-3,5,5-trimethylcyclohexylamine, 3-aminopropyltriethoxysilane, 4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with m-phenylenebis(methylamine), Fatty acids, tall-oil, reaction products with bisphenol A, epichlorohydrin, glycidyl tolyl ether and triethylenetetramine

**Additional information****Remark**

For industrial use only.

2.3. Other hazards**Information pertaining to special dangers for human and environment**

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]
90-72-2	202-013-9	2,4,6-tris(dimethylaminomethyl)phenol	1 < 5	Acute Tox. 4, H302 / Eye Irrit. 2, H319 / Skin Irrit. 2, H315
100-51-6	202-859-9	benzyl-alcohol	1 < 5	Acute Tox. 4, H332 / Acute Tox. 4, H302
140-31-8	205-411-0	2-piperazin-1-ylethylamine	< 3	Acute Tox. 4, H312 / Acute Tox. 4, H302 / Skin Corr. 1B, H314 / Skin Sens. 1, H317 / Aquatic Chronic 3, H412
919-30-2	213-048-4	3-aminopropyltriethoxysilane	1 < 5	Acute Tox. 4, H302 / Skin Corr. 1B, H314
2855-13-2	220-666-8	3-aminomethyl-3,5,5-trimethylcyclohexylamine	1 < 5	Acute Tox. 4, H312 / Acute Tox. 4, H302 / Skin Corr. 1B, H314 / Skin Sens. 1, H317 / Aquatic Chronic 3, H412
1477-55-0	216-032-5	m-xylylendiamin	< 1	Acute Tox. 2, H332 / Acute Tox. 2, H302 / Skin Corr. 1B, H314 / Skin Sens. 1, H317 / Aquatic Chronic 4, H412
61788-44-1	262-975-0	Phenol, styrenated	< 1	Skin Irrit. 2, H315 / Skin Sens. 1, H317 / Aquatic Chronic 2, H411
186321-96-0		Fatty acids, tall-oil, reaction products with bisphenol A, epichlorohydrin, glycidyl tolyl ether and triethylenetetramine	1 < 5	Skin Irrit. 2, H315 / Eye Dam. 1, H318 / Skin Sens. 1, H317 / Aquatic Acute 1, H400 M=1 / Aquatic Chronic 1, H410 M=1
113930-69-1	500-302-7	4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with m-phenylenebis(methylamine)	10 < 15	Skin Corr. 1B, H314 / Eye Dam. 1, H318 / Skin Sens. 1, H317 / Aquatic Acute 2, H401 / Aquatic Chronic 2, H411
71074-89-0	275-162-0	Bis((dimethylamino)methyl)phenol	< 1	Skin Corr. 1B, H314 / Acute Tox. 4, H302 / Acute Tox. 4, H312 / Eye Dam. 1, H318 / Aquatic Chronic 3, H412 / Skin Sens. 1B, H317

REACH

CAS No	Name	REACH registration number
90-72-2	2,4,6-tris(dimethylaminomethyl)phenol	01-2119560597-27
100-51-6	benzyl-alcohol	01-2119492630-38
140-31-8	2-piperazin-1-ylethylamine	01-2119471486-30
919-30-2	3-aminopropyltriethoxysilane	01-2119480479-24
2855-13-2	3-aminomethyl-3,5,5-trimethylcyclohexylamine	01-2119514687-32
1477-55-0	m-xylylendiamin	01-2119480150-50
61788-44-1	Phenol, styrenated	01-2119980970-27

**REACH (continued)**

CAS No	Name	REACH registration number
186321-96-0	Fatty acids, tall-oil, reaction products with bisphenol A, epichlorohydrin, glycidyl tolyl ether and triethylenetetramine	01-2119983521-35
113930-69-1	4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with m-phenylenebis(methylamine)	01-2119965162-39
71074-89-0	Bis((dimethylamino)methyl)phenol	not subject to registration

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 the event of symptoms refer for medical treatment.

In case of skin contact

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

Consult a doctor if skin irritation persists.

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.

Rinse out mouth and give plenty of water to drink.

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

Coughing

Respiratory complaints

Skin burns

Nausea

skin irritation

Physician's information / possible dangers

Causes serious eye damage.

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

No information available.

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.

Nitrogen oxides (NO_x)
Carbon monoxide (CO)
Carbon dioxide (CO₂)

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.

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.

High risk of slipping due to leakage/spillage of product.

6.2. Environmental precautions

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).

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**

Avoid formation of aerosols.

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.

Work in rooms with good ventilation.

Keep separated from food and feed.

Wash hands before breaks and after work.

**Advice on protection against fire and explosion**

Keep away from sources of ignition - No smoking

Protect from heat and sunlight.

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.

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

Protect from atmospheric moisture and water

Protect from heat and direct solar radiation.

Keep container dry and store at cool and aired place.

Store in a dry place.

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
140-31-8	2-piperazin-1-ylethylamine	20 mg/kg bw/day	DNEL acute dermal, short-term (systemic)	
		0,04 mg/cm ²	DNEL acute dermal, short-term (local)	
		21,4 mg/m ³	DNEL acute inhalative (systemic)	
186321-96-0	Fatty acids, tall-oil, reaction products with bisphenol A, epichlorohydrin, glycidyl tolyl ether and triethylenetetramine	3,33 mg/kg bw/day	DNEL long-term dermal (systemic)	
		23,5 mg/m ³	DNEL long-term inhalative (systemic)	
90-72-2	2,4,6-tris(dimethylaminomethyl)phenol	0,31 mg/m ³	DNEL long-term inhalative (systemic)	

PNEC

CAS No	Substance name	Value	Code	Remark
140-31-8	2-piperazin-1-ylethylamine	0,058 mg/l	PNEC aquatic, freshwater	
		250 mg/l	PNEC sewage treatment plant (STP)	
		21,5 mg/kg	PNEC sediment, marine water	
		0,0058 mg/l	PNEC aquatic, marine water	
		215 mg/kg	PNEC sediment, freshwater	



Safety Data Sheet according to Regulation (EC)

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WEICON HP Hardener

DNEL-/PNEC-values (continued)

CAS No	Substance name	Value	Code	Remark
186321-96-0	Fatty acids, tall-oil, reaction products with bisphenol A, epichlorohydrin, glycidyl tolyl ether and triethylenetetramine	0,005 mg/kg	PNEC sediment, marine water	
		0,019 µg/l	PNEC aquatic, marine water	
		0,186 µg/l	PNEC aquatic, freshwater	
		1,58 mg/l	PNEC sewage treatment plant (STP)	
		0,005 mg/kg	PNEC sediment, freshwater	
		0,00089 mg/kg	PNEC soil, freshwater	
90-72-2	2,4,6-tris(dimethylaminomethyl)phenol	0,0084 mg/l	PNEC aquatic, marine water	
		0,084 mg/l	PNEC aquatic, freshwater	
		0,2 mg/l	PNEC sewage treatment plant (STP)	

Additional advice

The statutory local and national regulations have to be observed.

8.2. Exposure controls

Respiratory protection

If ventilation insufficient, wear respiratory protection.

Short term: filter apparatus, combination filter A-P2

Hand protection

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

Glove material specification [make/type, thickness, permeation time/life, wetting resistance]: Nitrile rubber; 0,4mm; 480min; 60min.

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

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

light yellow

Odour

similar to amine

Odour threshold

**WEICON HP Hardener**

not determined

Important health, safety and environmental information

	Value	Temperature	at	Method	Remark
pH value	ca. 11	20			1:1 in water
boiling point	not applicable				
melting point	not determined				
Flash point	> 100 °C				
Vapourisation rate	not determined				
Flammable (solid)	not determined				
Flammability (gas)	not determined				
Ignition temperature	not determined				
Self ignition temperature					The product is not self-igniting.
Lower explosion limit	not determined				
Upper explosion limit	not determined				
Vapour pressure	not determined				
Relative density	ca. 1,4 g/cm ³				
Vapour density	not determined				
Solubility in water					partially soluble
Solubility/other	not determined				
Partition coefficient n-octanol/water (log P O/W)	not determined				
Decomposition temperature	not determined				
Viscosity dynamic	> 1000 Pa*s	25 °C			
Viscosity kinematic	not determined				
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.

Reactions with oxidising agents.

10.4. Conditions to avoid

Keep away from heat.

10.5. Incompatible materials**Substances to avoid**

Acid

oxidising agent

10.6. Hazardous decomposition products

Gases/vapours, corrosive

Gases/vapours, toxic

Carbon monoxide and carbon dioxide.

Nitrous oxides (NO_x)

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
LD50 acute oral	1030 mg/kg	rat	OECD 401	CAS: 1477-55-0
LD50 acute dermal	866 mg/kg	rabbit		CAS: 140-31-8
LC50 acute inhalation	1,34 mg/l (4 h)	rat		CAS: 1477-55-0
Skin irritation	corrosive			
Eye irritation	corrosive			
Skin sensitization	sensitizing			

Subacute Toxicity - Carcinogenicity

	Value	Species	Method	Validation
Mutagenicity				No experimental information on genotoxicity in vitro available.



Value	Species	Method	Validation
Reproduction-Toxicity			No indications of toxic effects were observed in reproduction studies in animals.
Carcinogenicity			No indications of carcinogenic effects are available from long-term trials.
Experiences made from practice			
Sensitization through skin contact possible.			
Causes corrosions.			
Risk of strong 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
Fish	LC50 1,81 mg/l (96 h)	Oncorhynchus mykiss	CAS: 186321-96-0
Daphnia	EC50 0,705 mg/l (48 h)	Daphnia magna	CAS: 186321-96-0
Algae	ErC50 0,186 mg/l (72 h)		CAS: 186321-96-0
Bacteria	EC50 157,6 g/m ³ (3 h)	OECD 209	CAS: 186321-96-0

12.2. Persistence and degradability

Elimination rate	Method of analysis	Method	Validation
Biological degradability	9 % (28 d) CAS: 186321-96-0	OECD 301 D	not readily degradable

12.3. Bioaccumulative potential

No information available.

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

	ADR/RID	IMDG	IATA-DGR
14.1. UN number	2735	2735	2735
14.2. UN proper shipping name	POLYAMINES, LIQUID, CORROSIVE, N.O.S. (m-xylylendiamin)	POLYAMINES, LIQUID, CORROSIVE, N.O.S. (m-xylylendiamin)	Polyamines, liquid, corrosive, n.o.s. (m-xylylendiamin)
14.3. Transport hazard class(es)	8	8	8
14.4. Packing group	III	III	III
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

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.



SECTION 16: Other information

Training advice

The product is intended only for the industrial/professional use.

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.

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.
H332	Harmful if inhaled.
H400	Very toxic to aquatic life.
H401	-?-
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.