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
Skin Corr. 1B **Eye Dam. 1**	**H314**	

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 (NOx)
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/cm2	DNEL acute dermal, short-term (local)	
		21,4 mg/m3	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/m3	DNEL long-term inhalative (systemic)	
90-72-2	2,4,6-tris(dimethylaminomethyl)phenol	0,31 mg/m3	DNEL long-term inhalative (systemic)	

PNEC

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

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, freshwater	
		1,58 mg/l	PNEC sewage treatment plant (STP)	
		0,019 µg/l	PNEC aquatic, marine water	
		0,186 µg/l	PNEC aquatic, freshwater	
		0,00089 mg/kg	PNEC soil, freshwater	
		0,005 mg/kg	PNEC sediment, marine water	
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.
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	Colour	Odour
pasty	light yellow	similar to amine

Odour threshold

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/cm3				
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 (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
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/m3 (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.