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

1.1. Product identifier

Name of product

WEICON UW Hardener
Code-Nr. 104402

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
Skin Sens. 1B	**H317**	
Aquatic Chronic 3	**H412**	

Hazard Statements

H317 May cause an allergic skin reaction.

H412 Harmful to aquatic life with long lasting effects.

2.2. Label elements

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

GHS07

Signal word
Warning

Hazard Statements

H317	May cause an allergic skin reaction.
H412	Harmful to aquatic life with long lasting effects.

Precautionary Statements

P102	Keep out of reach of children.
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
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.
P302 + P352	IF ON SKIN: Wash with plenty of water.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P312	Call a POISON CENTER/doctor/if you feel unwell.
P333 + P313	If skin irritation or rash occurs: Get medical advice/attention.
P362 + P364	Take off contaminated clothing and wash it before reuse.
P405	Store locked up.
P501	Dispose of contents/container to hazardous or special waste collection point.

! Hazardous ingredients for labeling
3-[3-(3-hydroxypropoxy)-2,2-bis[(3-hydroxypropoxy)methyl]propoxy]propan-1-ol; 3-sulfanylpropane-1,2-diol, 3,6-diazaoctanethylenediamin

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
! Hazardous ingredients

CAS No	EC No	Name	[% weight]	Classification according to Regulation (EC) No 1272/2008 [CLP/GHS]
112-24-3	203-950-6	3,6-diazaoctanethylenediamin	< 1	Acute Tox. 4, H312 / Skin Corr. 1B, H314 / Skin Sens. 1, H317 / Aquatic Chronic 3, H412
14807-96-6	238-877-9	talcum (Mg3H2(SiO3)4)	1 - 5	
13463-67-7	236-675-5	titanium-dioxide	5 <= 10	
90-72-2	202-013-9	2,4,6-Tri-(dimethylaminomethyl)phenol	<= 4,9	Acute Tox. 4, H302 / Skin Irrit. 2, H315 / Eye Irrit. 2, H319 / Acute Tox. 4, H312

Hazardous ingredients (continued)

CAS No	EC No	Name	[% weight]	Classification according to Regulation (EC) No 1272/2008 [CLP/GHS]
1477-55-0	**216-032-5**	**m-Phenylenbis (methylamine)**	**<= 2,4**	**Acute Tox. 4, H302 / Skin Irrit. 2, H315 / Eye Irrit. 2, H319**
72244-98-5	**615-735-8**	**3-[3-(3-hydroxypropoxy)-2,2-bis[(3-hydroxypropoxy)methyl]propoxy]propan-1-ol; 3-sulfanylpropane-1,2-diol**	**50 <= 75**	**Skin Sens. 1B, H317 / Aquatic Chronic 3, H412**

REACH

CAS No	Name	REACH registration number
112-24-3	3,6-diazaoctanethylenediamin	not subject to registration
14807-96-6	talcum (Mg3H2(SiO3)4)	01-2120140278-58
13463-67-7	titanium-dioxide	01-2119489379-17
90-72-2	2,4,6-Tri-(dimethylaminomethyl)phenol	01-2119560597-27
1477-55-0	m-Phenylenbis (methylamine)	01-2119480150-50
72244-98-5	3-[3-(3-hydroxypropoxy)-2,2-bis[(3-hydroxypropoxy)methyl]propoxy]propan-1-ol; 3-sulfanylpropane-1,2-diol	01-2120118957-46

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
In case of contact with eyes rinse with plenty of water carefully. In the event of persistent symptoms seek medical treatment.

In case of ingestion
Do not induce vomiting.
Call for a doctor immediately.
Rinse out mouth thoroughly with water.
Give plenty of water to drink in small sips.

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

No information available.

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.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media
Fire-extinguishing activities according to surrounding.

5.2. Special hazards arising from the substance or mixture
Metal oxides
In case of fire formation of dangerous gases possible.
Nitrogen oxides (NOx)
Carbon monoxide (CO)
Carbon dioxide (CO2)
Sulfur oxide

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

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
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
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
Do not inhale vapours.
Avoid contact with eyes and skin
Do not inhale dust.
Ensure sufficient ventilation.

Hygiene measures
At work do not eat, drink and smoke.
Remove soiled or soaked clothing immediately.
Work in rooms with good ventilation.

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.
Keep only in original container.

Advice on storage compatibility
Do not store together with animal feedstuffs.
Do not store together with food.

Further information on storage conditions
Store at +5 till +25 °C.
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

! SECTION 8: Exposure controls/personal protection

8.1. Control parameters
! Ingredients with occupational exposure limits to be monitored

CAS No	Name	Code	[mg/m3]	[ppm]	Remark
1314-56-3	Diphosphorus pentoxide	8 hours			EH40/2005
		Short-term	2		
14807-96-6	Talc respirable dust	8 hours	1		EH40/2005
13463-67-7	Titanium dioxide: total inhalable dust	8 hours	10		EH40/2005
13463-67-7	Titanium dioxide: respirable dust	8 hours	4		EH40/2005

DNEL-/PNEC-values
DNEL worker

CAS No	Substance name	Value	Code	Remark
13463-67-7	titanium-dioxide	10 mg/m3	DNEL long-term inhalative (systemic)	
90-72-2	2,4,6-Tri-(dimethylaminomethyl)phenol	0,2 mg/kg bw/day	DNEL long-term dermal (systemic)	
		0,31 mg/m3	DNEL long-term inhalative (systemic)	

PNEC

CAS No	Substance name	Value	Code	Remark
13463-67-7	titanium-dioxide	100 mg/l	PNEC sewage treatment plant (STP)	
		1 mg/l	PNEC aquatic, marine water	
		1000 mg/kg	PNEC sediment, marine water	
		100 mg/kg	PNEC sediment, freshwater	
		0,127 mg/l	PNEC aquatic, freshwater	
90-72-2	2,4,6-Tri-(dimethylaminomethyl)phenol	0,084 mg/l	PNEC aquatic, freshwater	
		0,2 mg/l	PNEC sewage treatment plant (STP)	

DNEL-/PNEC-values (continued)

CAS No	Substance name	Value	Code	Remark
		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
In case of insufficient ventilation or long-term effect use breathing apparatus.
Short term: filter apparatus, filter AX

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.

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	cream	sulphur-like

Odour threshold
not determined

Important health, safety and environmental information

	Value	Temperature	at	Method	Remark
pH value	not applicable				
boiling point	not determined				
melting point	not determined				
Flash point	not applicable				
Vapourisation rate	not determined				
Flammable (solid)	not determined				
Flammability (gas)	not determined				
Ignition temperature	> 200 °C				estimate

	Value	Temperature	at	Method	Remark
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	1,421 g/cm3	20 °C			
Vapour density	not determined				
Solubility in water					insoluble
Solubility/other	not determined				
Partition coefficient n-octanol/water (log P O/W)	not determined				
Decomposition temperature	not determined				
Viscosity dynamic	not determined				
Viscosity kinematic	not determined				

Oxidising properties
No information available.

Explosive properties
not determined

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
No information available.

10.4. Conditions to avoid
Keep away from heat.

10.5. Incompatible materials
No information available.

10.6. Hazardous decomposition products
Carbon monoxide and carbon dioxide.
Nitrous oxides (NOx)
Toxic gases/vapours
Metaloxides

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	> 2000 mg/kg			ATE
LD50 acute dermal	> 2000 mg/kg			ATE
LC50 acute inhalation	> 20 mg/l ()			ATE
Skin irritation	low irritant effect - not necessary to label			
Eye irritation	low irritant - no labeling duty			
Skin sensitization	sensitizing			

Subacute Toxicity - Carcinogenicity

	Value	Species	Method	Validation
Mutagenicity				No experimental information on genotoxicity in vitro available.
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.
Frequent contact specially if dried out may cause skin and eye irritations.

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
Algae	EC50 3700 Mikro-g/l (96 h)	Pseudokirchneriella subcapitata		CAS: 112-24-3

12.2. Persistence and degradability
No information available.

12.3. Bioaccumulative potential
Slight bioaccumulation 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
Harmful 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.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste code No.	**Name of waste**
08 04 10	waste adhesives and sealants other than those mentioned in 08 04 09
15 01 02	plastic packaging

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	-	-	-
14.2. UN proper shipping name	-	-	-
14.3. Transport hazard class(es)	-	-	-
14.4. Packing group	-	-	-
14.5. Environmental hazards	-	-	-

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

Transport/further information
No dangerous goods as defined by the transport regulations - ADR/RID, IMDG, ICAO/IATA-DGR.

! 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

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: 2.6

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.
H319 Causes serious eye irritation.
H412 Harmful to aquatic life with long lasting effects.