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

1.1. Product identifier

Name of product

WEICON Ceramic BL Hardener
Code-Nr. 104002

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
Acute Tox. 4	**H302**	
Acute Tox. 4	**H332**	

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

Hazard classes and Hazard categories	Hazard Statements	Classification procedure
Skin Corr. 1B	**H314**	
Eye Dam. 1		
Skin Sens. 1	**H317**	
Aquatic Chronic 3	**H412**	

Hazard Statements

H302 + H332	Harmful if swallowed or if inhaled.
H314	Causes severe skin burns and eye damage.
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]

GHS05 GHS07

Signal word
Danger

Hazard Statements

H302 + H332	Harmful if swallowed or if inhaled.
H314	Causes severe skin burns and eye damage.
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.
P260	Do not breathe vapours/spray.
P264	Wash hands thoroughly after handling.
P270	Do no eat, drink or smoke when using this product.
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.
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.
P312	Call a POISON CENTER or doctor/physician if you feel unwell.
P333 + P313	If skin irritation or rash occurs: Get medical advice/attention.
P363	Wash contaminated clothing before reuse.
P405	Store locked up.
P501	Dispose of contents/container to hazardous or special waste collection point.

Hazardous ingredients for labeling
2,2,4(or 2,4,4)-trimethylhexane-1,6-diamine, Amines, polyethylenepoly-, triethylenetetramine fraction, M-phenylenebis (methylamine)

Additional information

Remark
For industrial use only.

2.3. Other hazards
Information pertaining to special dangers for human and environment
Harmful by inhalation 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
Modified amine hardener.

Hazardous ingredients

CAS No	EC No	Name	[% weight]	Classification according to Regulation (EC) No 1272/2008 [CLP/GHS]
1477-55-0	216-032-5	M-phenylenebis (methylamine)	25 < 50	Acute Tox. 4, H302, H332 / Skin Corr. 1B, H314 / Eye Dam. 1, H318 / Skin Sens. 1, H317 / Aquatic Chronic 3, H412 / , EUH071
90640-67-8	292-588-2	Amines, polyethylenepoly-, triethylenetetramine fraction	50 < 55	Acute Tox. 4, H302, H312 / Skin Corr. 1B, H314 / Skin Sens. 1, H317 / Eye Dam. 1, H318 / Aquatic Chronic 3, H412
25513-64-8	247-063-2	2,2,4(or 2,4,4)-trimethylhexane-1,6-diamine	1 < 5	Acute Tox. 4, H302 / Skin Corr. 1A, H314 / Skin Sens. 1A, H317 / Eye Dam. 1

REACH

CAS No	Name	REACH registration number
1477-55-0	M-phenylenebis (methylamine)	01-2119480150-50
90640-67-8	Amines, polyethylenepoly-, triethylenetetramine fraction	01-2119487919-13
25513-64-8	2,2,4(or 2,4,4)-trimethylhexane-1,6-diamine	01-2119560598-25

SECTION 4: First aid measures

4.1. Description of first aid measures
General information
Remove contaminated soaked clothing immediately.
In case of allergic reactions, specially at respiratory tract, seek medical treatment immediately.
Adhere to personal protective measures when giving first aid.

In case of inhalation
Remove the casualty into fresh air and keep him immobile.
Ensure of fresh air.
No mouth-to-mouth resuscitation by first aid.
Seek medical treatment immediately.
Artifical respiration with respiration bag or respirator.

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
In case of contact with eyes rinse thoroughly with water.
Call for a doctor immediately.

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
Unconsciousness
Coughing
vomiting
Respiratory complaints
Headache
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)
If swallowed or in the event of vomiting, risk of entering the lungs.
Keep under medical supervision for at least 48 hours.

SECTION 5: Firefighting measures

5.1. Extinguishing media
Suitable extinguishing media
Fire-extinguishing activities according to surrounding.
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
Wear full protective clothing.
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.

6.2. Environmental precautions
Collect contaminated water / firefighting water separately.
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 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.
Ventilate store-rooms thoroughly.
Keep only in 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.

Further information on storage conditions
Keep container tightly closed and store at cool and aired place.
Protect from heat and direct solar radiation.
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
1477-55-0	M-phenylenebis (methylamine)	0,33 mg/kg	DNEL long-term dermal (systemic)	
		0,2 mg/m3	DNEL long-term inhalative (local)	
		1,2 mg/m3	DNEL long-term inhalative (systemic)	
90640-67-8	Amines, polyethylenepoly-, triethylenetetramine fraction	5380 mg/m3	DNEL acute inhalative (systemic)	
		0,57 mg/kg bw/day	DNEL long-term dermal (systemic)	
		1 mg/m3	DNEL long-term inhalative (systemic)	
		0,028 mg/m3	DNEL acute dermal, short-term (local)	

PNEC

CAS No	Substance name	Value	Code	Remark
1477-55-0	M-phenylenebis (methylamine)	0,43 mg/kg	PNEC sediment, freshwater	
		10 mg/l	PNEC sewage treatment plant (STP)	
		0,009 mg/l	PNEC soil, marine water	
		0,094 mg/l	PNEC soil, freshwater	

Additional advice
The statutory local and national regulations have to be observed.

8.2. Exposure controls
Respiratory protection
If ventilation insufficient, wear respiratory protection.
Breathing apparatus in the event of aerosol or mist formation.
Kurzzeitig Filtergerät, Kombinationsfilter A2-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
Sufficient ventilation and exhaustion.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Colour	Odour
liquid	light yellow	characteristic

Odour threshold
not determined

Important health, safety and environmental information

	Value	Temperature	at	Method	Remark
pH value	not determined				
boiling point	not determined				
melting point	not determined				
Flash point	> 100 °C				
Vapourisation rate	not determined				
Flammable (solid)	not determined				
Flammability (gas)	not determined				
Ignition temperature	> 200 °C				
Self ignition temperature					The product is not self-igniting.
Lower explosion limit	not determined				
Upper explosion limit	not determined				
Vapour pressure	ca. 0,1 hPa	20 °C			
Relative density	1,02 g/cm3	25 °C			
Vapour density	not determined				
Solubility in water	not determined				
Solubility/other	not determined				
Partition coefficient n-octanol/water (log P O/W)	not determined				
Decomposition temperature	not determined				
Viscosity dynamic	450 mPa*s	25 °C			
Viscosity kinematic	not determined				

Oxidising properties
No information available.

Explosive properties
No information available.

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
Strong exothermic reaction with acids.
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), concentrated
Acid, concentrated
Oxidising agent, strong

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

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	1363			ATE
LD50 acute dermal	1465 mg/kg	rabbit		CAS: 90640-67-8
LC50 acute inhalation	2,82 ()		Aerosol	ATE
Skin irritation	corrosive			

	Value/Validation	Species	Method	Remark
Eye irritation	corrosive			
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
Harmful to health by prolonged exposure.
Risk of strong health injuries in case of long-term exposition.
Sensitization through skin contact possible.
Inhalation can cause damage to the respiratory tract or lungs.
Causes corrosions.
Risk of strong eye injuries.
Irritates respiratory tract.

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 87,6 mg/l (96 h)	Oryziatinae, e.g. Oryzias latipes	OECD 203	CAS: 1477-55-0
Daphnia	EC50 15,2 mg/l (48 h)	Daphnia magna	OECD 202	CAS: 1477-55-0
Algae	ErC50 33,3 mg/l (72 h)	Green algae		CAS: 1477-55-0

12.2. Persistence and degradability

	Elimination rate	Method of analysis	Method	Validation
Biological degradability	49 % (28 d) CAS: 1477-55-0		OECD 301 B	Biodegradable

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
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.
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.
Contaminated packaging should be emptied as far as possible and after appropriate cleansing may be taken fot reuse.
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	AMINES, LIQUID, CORROSIVE, N.O.S. (3,6-Diazaoctan-1,8-diamin; Triethylentetramin; 1,3-Benzoldimethanamin)	AMINES, LIQUID, CORROSIVE, N.O.S. (3,6-diazaoctanethylenediamin; m-phenylenbis (methylamine))	Amines, liquid, corrosive, n.o.s. (3,6-diazaoctanethylenediamin; m-phenylenbis (methylamine))
14.3. Transport hazard class(es)	8	8	8
14.4. Packing group	II	II	II
14.5. Environmental hazards	No	No	No

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

Transport/further information
Marine pollutant: NO

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.

EUH071 Corrosive to the respiratory tract.
H302 Harmful if swallowed.
H302, -?-
H302, -?-
H314 Causes severe skin burns and eye damage.
H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.
H412 Harmful to aquatic life with long lasting effects.