

**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1. Product identifier****Name of product**WEICON Casting Resin MS 1000 Hardener
Code-Nr. 105202**1.2. Relevant identified uses of the substance or mixture and uses advised against****Recommended intended purpose(s)**

Hardener

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
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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 Irrit. 2	H315
Eye Irrit. 2	H319
Skin Sens. 1	H317
Aquatic Chronic 2	H411

Hazard Statements

H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H411	Toxic to aquatic life with long lasting effects.

Additional hints

OECD 404 Acute Dermal Irritation/Corrosion Test: Reizend / Irritant

2.2. Label elements

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



GHS07



GHS09

Signal word

Warning

Hazard Statements

H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
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.
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.
P310	Immediately call a POISON CENTER or doctor/physician.
P332 + P313	If skin irritation occurs: Get medical advice/attention.
P333 + P313	If skin irritation or rash occurs: Get medical advice/attention.
P337 + P313	If eye irritation persists: Get medical advice/attention.
P362 + P364	Take off contaminated clothing and wash it before reuse.
P391	Collect spillage.
P501	Dispose of contents/container to hazardous or special waste collection point.

Hazardous ingredients for labeling

Reaction mass of trientine and trientine, mono- and di-propoxylated

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**

Preparation of different active substances



Safety Data Sheet according to Regulation (EC)

No. 1907/2006 (REACH)

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WEICON Casting Resin MS 1000 Hardener

Hazardous ingredients

CAS No	EC No	Name	[% weight]	Classification according to Regulation (EC) No 1272/2008 [CLP/GHS]
-	942-835-1	Reaction mass of trientine and trientine, mono- and di-propoxylated	60 - 100	Skin Irrit. 2, H315 / Skin Sens. 1B, H317 / Eye Irrit. 2A, H320 / Aquatic Acute 2, H401 / Aquatic Chronic 2, H411

REACH

CAS No	Name	REACH registration number
-	Reaction mass of trientine and trientine, mono- and di-propoxylated	01-2120098765-38

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

Remove contaminated soaked clothing immediately.

Take affected person into fresh air.

In case of inhalation

Remove the casualty into fresh air and keep him immobile.

Seek medical treatment immediately.

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 thoroughly with water.

Give plenty of water to drink in small sips.

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

Physician's information / possible symptoms

vomiting

skin irritation

Physician's information / possible dangers

allergic reactions

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

Fire-extinguishing activities according to surrounding.

! Unsuitable extinguishing media

Full water jet

5.2. Special hazards arising from the substance or mixture

Danger of bursting

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

Remove persons to safety.

Use personal protective clothing.

Keep away sources of ignition.

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

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

Send in suitable containers for recovery or disposal.

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.

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.

Advice on storage compatibility

Do not store with acids or alkalis.

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 heat and direct solar radiation.

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

Storage temperature between 2°C to 40°C

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
-	Reaction mass of trientine and trientine, mono- and di-propoxylated	3,51 mg/m ³	DNEL long-term inhalative (systemic)	
		2 mg/kg	DNEL long-term dermal (systemic)	

PNEC

CAS No	Substance name	Value	Code	Remark
-	Reaction mass of trientine and trientine, mono- and di-propoxylated	0,171 mg/kg	PNEC sediment, freshwater	
		0,0041 mg/l	PNEC aquatic, freshwater	
		0,0171 mg/kg	PNEC sediment, marine water	
		4,3 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, filter AX/P2, otherwise environment-independent breathing apparatus.

! Hand protection

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

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.

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**

liquid

Colour

clear

Odour

similar to amine

Odour threshold

not determined

Important health, safety and environmental information

	Value	Temperature	at	Method	Remark
pH value	12	20	500 g/l		1:1 in water
boiling point	> 200 °C				
melting point	not determined				
Flash point	152 °C			DIN 51758	Pensky-Martens Closed Cup
Vapourisation rate	not determined				
Flammable (solid)	not determined				
Flammability (gas)	not determined				
Ignition temperature	not applicable				
Self ignition temperature					The product is not self-igniting.
Lower explosion limit	not determined				
Upper explosion limit	not determined				
Vapour pressure	0,001 hPa	20 °C			
Relative density	1-1,05 g/cm ³	25 °C			
Vapour density	not determined				
Solubility in water		20 °C			miscible
Solubility/other	not determined				
Partition coefficient n-octanol/water (log P O/W)	not determined				
Decomposition temperature	> 200 °C				



	Value	Temperature	at	Method	Remark
Viscosity dynamic	370 - 470 mPa*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 strong acids and alkalis.

Reactions with strong 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

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	4500 mg/kg	rat		Information concerns to main component.



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	Value/Validation	Species	Method	Remark
LD50 acute dermal	> 2150 mg/kg	rat		Informations concern to main component.
Skin irritation	irritant	rabbit	OECD 404 Acute Dermal Irritation / Corrosion	Test results: NOT corrosive to skin and eyes.
Eye irritation	strong irritant	rabbit eye	OECD 405	Toxicology test with the product.
Skin sensitization	sensitizing	Guinea pig		Toxicology test with the product.

Subacute Toxicity - Carcinogenicity

	Value	Species	Method	Validation
Mutagenicity			OECD 476 In vitro Mammalian Cell Gene Mutation Test	No mutagenity, after different in-vitro studies.
Reproduction-Toxicity	750 mg/kg	Rat	OECD 422 Combined Repeated Dose Toxicity Study with the Reproduction/ Developmental Toxicity Screening Test	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

Test results: NOT corrosive to skin and eyes.
Sensitization through skin contact possible.
Irritates eyes and skin.

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 > 4,1 mg/l (96 h)	rainbow trout	OECD 203	EG: 942-835-1
Daphnia	EC50 48 mg/l (48 h)	Daphnia magna	OECD 202	EG: 942-835-1



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	Value	Species	Method	Validation
Algae	EC50 4,1 mg/l (72 h)	Selenastrum capricornutum	OECD 201, cell reproduction	EG: 942-835-1
Bacteria	EC10 38 mg/l (30 min)	activated sludge	OECD 209	EG: 942-835-1

12.2. Persistence and degradability

	Elimination rate	Method of analysis	Method	Validation
Biological degradability	4 % (28 d) EG: 942-835-1		OECD 301 F	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, fishes and plankton.

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	3082	3082	3082
14.2. UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N. O.S. (Triethylene Tetramine Propoxylated, Triethylene Trientine)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Triethylene Tetramine Propoxylated, Triethylene Trientine)	Environmentally hazardous substance, liquid, n.o.s. (Triethylene Tetramine Propoxylated, Triethylene Trientine)



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	ADR/RID	IMDG	IATA-DGR
14.3. Transport hazard class(es)	9	9	9
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) 9

tunnel restriction code E

Classification code M6

Marine transport IMDG

MARINE POLLUTANT

! 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: 9.2

H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H320	Uzrokuje nadražaj oèiju.
H401	-?-
H411	Toxic to aquatic life with long lasting effects.