! 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
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	**H312**	
Skin Irrit. 2	**H315**	
Eye Dam. 1	**H318**	
Skin Sens. 1	**H317**	
Aquatic Chronic 3	**H412**	

Hazard Statements

H302 + H312	Harmful if swallowed or in contact with skin.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.

H318	Causes serious eye damage.
H412	Harmful to aquatic life with long lasting effects.

Additional hints
OECD 404 Acute Dermal Irritation/Corrosion Test: Reizend / Irritant
Contains 72% of constituent with unknown hazard to the aquatic environment
72% of the mixture consists of one or more components of unknown acute toxicity.

2.2. Label elements
Labelling according to Regulation (EC) No 1272/2008 [CLP/GHS]


GHS05


GHS07

Signal word
Danger

Hazard Statements

H302 + H312	Harmful if swallowed or in contact with skin.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H412	Harmful to aquatic life with long lasting effects.

Precautionary Statements

P102	Keep out of reach of children.
P264	Wash hands thoroughly after handling.
P270	Do no eat, drink or smoke when using this product.
P272	Contaminated work clothing should not be allowed out of the workplace.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P301 + P312	IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
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.
P330	Rinse mouth.
P332 + P313	If skin irritation occurs: Get medical advice/attention.
P333 + P313	If skin irritation or rash occurs: Get medical advice/attention.
P362 + P364	Take off contaminated clothing and wash it before reuse.
P501	Dispose of contents/container to hazardous or special waste collection point.

Hazardous ingredients for labeling
trientine

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

Hazardous ingredients

CAS No	EC No	Name	[% weight]	Classification according to Regulation (EC) No 1272/2008 [CLP/GHS]
112-24-3	203-950-6	trientine	13 - 30	Acute Tox. 4, H302; H312 / Skin Corr. 1B, H314 / Eye Dam. 1, H318 / Skin Sens. 1, H317 / Aquatic Chronic 3, H412

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.
Seek medical treatment immediately.

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
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
Stomache -ache
vomiting
Respiratory complaints
Skin burns
skin irritation

Physician's information / possible dangers
allergic reactions
Causes serious eye damage.

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
Product does not burn, fire-extinguishing activities according to surrounding.

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.

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.
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 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
Store only in original container at cool and aired place.
Protect from heat and direct solar radiation.
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
112-24-3	trientine	20 mg/kg	DNEL short-term oral (acute)	
		0,41 mg/kg bw/day	DNEL long-term oral (repeated)	
		1 mg/kg	DNEL acute dermal, short-term (local)	
		8 mg/kg bw/day	DNEL acute dermal, short-term (systemic)	
		0,028 mg/kg bw/day	DNEL long-term dermal (local)	
		0,57 mg/kg bw/day	DNEL long-term dermal (systemic)	
		5380 mg/m3	DNEL acute inhalative (systemic)	
		1 mg/m3	DNEL long-term inhalative (systemic)	

PNEC

CAS No	Substance name	Value	Code	Remark
112-24-3	trientine	19,2 mg/kg	PNEC sediment, marine water	
		0,19 mg/l	PNEC aquatic, freshwater	
		95,9 mg/kg	PNEC sediment, freshwater	
		0,038 mg/l	PNEC aquatic, marine water	

DNEL-/PNEC-values (continued)

CAS No	Substance name	Value	Code	Remark
		4,25 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]: 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
liquid	clear	similar to amine

Odour threshold
not determined

Important health, safety and environmental information

	Value	Temperature	at	Method	Remark
pH value	12	20			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				

	Value	Temperature	at	Method	Remark
Self ignition temperature	not determined				
Lower explosion limit	not determined				
Upper explosion limit	not determined				
Vapour pressure	0,1 Pa	20 °C			
Relative density	1-1,05 g/cm3	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)	-2,65				
Decomposition temperature	> 200 °C				
Viscosity dynamic	370 - 470 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
No information available.

10.3. Possibility of hazardous reactions
Reactions with strong acids and alkalies.
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 below 200°C.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity/Irritation/Sensitization

	Value/Validation	Species	Method	Remark
LD50 acute oral	1716 mg/kg	rat		CAS: 112-24-3
LD50 acute dermal	1465 mg/kg	rabbit		CAS: 112-24-3
Skin irritation	irritant	rabbit	OECD 404	Toxicology tests with the product
Eye irritation	corrosive			
Skin sensitization	sensitizing	Guinea pig	OECD 406	CAS: 112-24-3

Subacute Toxicity - Carcinogenicity

	Value	Species	Method	Validation
Chronic Toxicity	NOAEL 50 mg/kg (90 d) Repeated Dose 90-Day Oral Toxicity Study in Rodents		OECD 408	-
Mutagenicity				No mutagenity, after different in-vitro studies.
Carcinogenicity				No indications of carcinogenic effects are available from long-term trials.

Experiences made from practice
OECD 404 Acute Dermal Irritation/Corrosion Test: Reizend / Irritant
Sensitization through skin contact possible.
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.

SECTION 12: Ecological information

12.1. Toxicity

Ecotoxicological effects

	Value	Species	Method	Validation
Fish	LC50 330 mg/l (96 h)	Fish	EPA	CAS: 112-24-3
Daphnia	EC10 1,9 mg/l (21 d)	Daphnia sp.	OECD 202	CAS: 112-24-3
Algae	ErC50 20 mg/l (72 h)	No data available	OECD 201, cell reproduction	CAS: 112-24-3
Bacteria	EC10 42,5 mg/l (30 min)	No data available		CAS: 112-24-3

12.2. Persistence and degradability

	Elimination rate	Method of analysis	Method	Validation
Biological degradability	0 % (162 d) CAS: 112-24-3		OECD 301 D	not degradable
Degradability	20 % (84 d) CAS: 112-24-3		OECD 302 A	not degradable

12.3. Bioaccumulative potential
Slight bioaccumulation potential.

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

Waste code No.	**Name of waste**
07 02 04*	other organic solvents, washing liquids and mother liquors

Wastes marked with an asterisk are considered to be hazardous waste pursuant to Directive 2008/98/EC on hazardous waste.

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.

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: 8.6

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.