

## 1. Product and company identification

### Product identifier

Trade name: Casting Resin MS 1000, Hardener

### Relevant identified uses of the substance or mixture and uses advised against

General use: Resin for 2 component adhesive (epoxy resin).  
Reserved for industrial and professional use.

### Details of the supplier of the safety data sheet

Company name: WEICON Inc.  
Street/POB-No.: 20 Steckle Place, Unit 20  
Postal Code, city: Kitchener, Ontario N2E 2C3, CA  
WWW: www.weicon.ca  
E-mail: info@weicon.ca  
Telephone: +1-519-896-5252  
Telefax: +1-519-896-5254  
Dept. responsible for information:  
Product-Safety-Department  
Telephone: +49(0)251 / 9322 - 0, Email: msds@weicon.de

### Emergency phone number

**EMERGENCY CONTACT – Canada (24h): Tel: ++1 866 928 0789 (Toll free)**

**Transport:**

**TRANSPORT EMERGENCY CONTACT - Canada (24h): Tel: ++1 866 928 0789 (Toll free)**

## 2. Hazards identification

### Emergency overview

Appearance: Physical state at 20 °C and 101.3 kPa: liquid  
Color: clear  
Odor: amine odor  
Classification: Acute Toxicity 4 (oral); Acute Toxicity 4 (dermal); Skin Corrosion 1B;  
Sensitization - skin 1; Aquatic toxicity - chronic 3;

Hazard symbols:



Signal word: **Danger**

Hazard statements: Harmful if swallowed.

Harmful in contact with skin.

Causes severe skin burns and eye damage.

May cause an allergic skin reaction.

Harmful to aquatic life with long lasting effects.



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according to WHMIS 2015 and ANSI Z400.1-2010

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Precautionary statements: Do not breathe dust/fume/gas/mist/vapors/spray.  
Wash hands and face thoroughly after handling.  
Do not eat, drink or smoke when using this product.  
Contaminated work clothing should not be allowed out of the workplace.  
Avoid release to the environment.  
Wear protective gloves/protective clothing/eye protection/face protection.  
IF SWALLOWED: rinse mouth. Do NOT induce vomiting.  
IF ON SKIN: Wash with plenty of water/soap.  
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].  
IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
Immediately call a POISON CENTER/doctor.  
Specific treatment (see 'First aid' on this label).  
Specific measures (see 'First aid' on this label).  
If skin irritation or rash occurs: Get medical advice/attention.  
Wash contaminated clothing before reuse.  
Store locked up.  
Dispose of contents/container to hazardous or special waste collection point.

### Regulatory status

This material is considered hazardous by the U.S. OSHA Hazard Communication Standard (29 CFR 1910.1200) and SIMDUT in Canada.

### Hazards not otherwise classified

72 percent of the mixture consists of ingredient(s) of unknown acute toxicity  
72 percent of the mixture consists of components of unknown hazards to the aquatic environment.  
see section 11: Toxicological information

## 3. Composition / Information on ingredients

Chemical characterisation: Hardener for 2 component adhesive

Relevant ingredients:

CAS No.	Designation	Content	Classification
CAS 112-24-3	Triethylentetramine	13 - 30 %	Acute Toxicity 4 (oral). Acute Toxicity 4 (dermal). Skin Corrosion 1B. Eye Damage 1. Sensitization - skin 1. Aquatic toxicity - chronic 3.

## 4. First aid measures

General information: Remove all contaminated clothes and footwear immediately unless stuck to skin.  
Wash contaminated clothing before reuse.

In case of inhalation: Provide fresh air. Immediately get medical attention.

Following skin contact: After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of water and soap.  
Wash contaminated clothing before reuse. Seek medical attention.

After eye contact: Immediately flush eyes with plenty of flowing water for 10 to 15 minutes holding eyelids apart. Remove contact lenses, if present and easy to do. Continue rinsing.  
Subsequently consult an ophthalmologist.



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After swallowing: Do not induce vomiting. Rinse mouth with water. Let water be swallowed in little sips. Never give anything by mouth to an unconscious person. Immediately get medical attention.

### Most important symptoms and effects, both acute and delayed

Harmful in contact with skin. Causes severe skin burns and eye damage. May cause an allergic skin reaction. Harmful if swallowed.  
Respiratory complaints, abdominal pain, vomiting, drowsiness.

### Information to physician

Treat symptomatically. Symptoms may develop several hours following exposure; medical observation therefore necessary for at least 48 hours.

## 5. Fire fighting measures

Flash point/flash point range:

152 °C (Closed Cup)

Auto-ignition temperature: not determined

Suitable extinguishing media:

Extinguishing is to be in accordance with the surrounding fire.

Extinguishing media which must not be used for safety reasons:

High power water jet

### Specific hazards arising from the chemical

Hazardous vapors may form during fires. In case of fire may be liberated: nitrogen oxides (NOx), carbon monoxide and carbon dioxide.

Protective equipment and precautions for firefighters:

Wear self-contained positive pressure breathing apparatus and full firefighting protective clothing. In case of fire and/or explosion do not breathe fumes.

Additional information: You have to dispose of contaminated extinguishing water according to the regulations of the authorities.

## 6. Accidental release measures

Personal precautions: Provide adequate ventilation. Use a breathing protection against vapors/aerosol. Do not breathe vapor or spray.  
Wear appropriate protective equipment. Take off contaminated clothing and wash it before reuse.  
Keep unprotected people away. Avoid contact with skin and eyes.

Environmental precautions:

Do not allow to enter into ground-water, surface water or drains. Do not allow to enter into soil/subsoil. If necessary notify appropriate authorities.

Methods for clean-up:

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents) and place in closed containers for disposal. Thoroughly clean surrounding area.

## 7. Handling and storage

### Handling

Advices on safe handling: Provide adequate ventilation, and local exhaust as needed. Avoid the formation of aerosol. Do not breathe vapor or spray.  
Wear appropriate protective equipment. Avoid contact with skin and eyes.  
Take off contaminated clothing and wash it before reuse.  
When using do not eat, drink or smoke. Wash hands before breaks and after work.



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Precautions against fire and explosion:

Take care of general rules for industrial preventive fire protection.

### Storage

Requirements for storerooms and containers:

Keep only in the original container. Protect from heat and direct sunlight. Store in a dry place.

Keep container tightly closed in a cool, well-ventilated place. Protect from frost. Storage temperature: 2-40 °C

Hints on joint storage:

Keep away from strong acids, strong alkalis and strong oxidizing agents.

Keep away from food, drink and animal feedingstuffs.

## 8. Exposure controls / personal protection

### Exposure guidelines

Occupational exposure limit values:

CAS No.	Designation	Type	Limit value
112-24-3	Triethylentetramine	Canada, Ontario: OEL TWA	3 mg/m <sup>3</sup> ; 0.5 ppm (May be absorbed through the skin.)

### Engineering controls

Provide good ventilation and/or an exhaust system in the work area.

See also information in chapter 7, section storage.

### Personal protection equipment (PPE)

Eye/face protection: Tightly sealed goggles according to OSHA Standard - 29 CFR: 1910.133 or ANSI Z87.1-2010.

Skin protection: Wear suitable protective clothing.

Protective gloves according to OSHA Standard - 29 CFR: 1910.138.

Glove material: Butyl caoutchouc (butyl rubber) - Layer thickness: 0.7 mm

Breakthrough time: > 480 min

Observe glove manufacturer's instructions concerning penetrability and breakthrough time.

Respiratory protection: Use a breathing protection against vapors/aerosol.

The filter class must be suitable for the maximum contaminant concentration (gas/vapor/aerosol/particulates) that may arise when handling the product.

General hygiene considerations:

Avoid contact with skin and eyes. Eye wash facility must be provided. Do not breathe vapor or spray.

Take off immediately all contaminated clothing and wash it before reuse.

When using do not eat, drink or smoke. Wash hands before breaks and after work.

## 9. Physical and chemical properties

### Information on basic physical and chemical properties

Appearance: Physical state at 20 °C and 101.3 kPa: liquid

Color: clear

Odor: amine odor

Odor threshold: not determined

pH value: at 50%: 12



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Melting point/freezing point:	not determined
Initial boiling point and boiling range:	> 200 °C
Flash point/flash point range:	152 °C (Closed Cup)
Evaporation rate:	No data available
Flammability:	not determined
Explosion limits:	LEL (Lower Explosion Limit): not determined UEL (Upper Explosive Limit): not determined
Vapor pressure:	at 20 °C: 0.1 Pa
Vapor density:	No data available
Density:	at 25 °C: 1.00 - 1.05 g/mL
Water solubility:	at 20 °C: miscible
Partition coefficient: n-octanol/water:	-2.65 log P(o/w) Based on the n-octanol/water partition coefficient accumulation in organisms is not expected.
Auto-ignition temperature:	not determined
Thermal decomposition:	>200 °C
Viscosity, dynamic:	at 25 °C: 370 - 470 mPa*s
Ignition temperature:	not determined

## 10. Stability and reactivity

Reactivity:	no data available
Chemical stability:	Stable under recommended storage conditions.
Possibility of hazardous reactions	Reacts with strong acids, strong alkalis, and strong oxidizing agents.
Conditions to avoid:	Protect from heat and direct sunlight. Protect from frost.
Incompatible materials:	Strong acids, alkalis and strong oxidizing agents
Hazardous decomposition products:	In case of fire may be liberated: nitrogen oxides (NOx), carbon monoxide and carbon dioxide.
Thermal decomposition:	>200 °C



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## 11. Toxicological information

### Toxicological tests

Toxicological effects: The statements are derived from the properties of the single components. No toxicological data is available for the product as such.

Acute toxicity (oral): Acute Toxicity 4 (oral) = Harmful if swallowed.

Acute toxicity (dermal): Acute Toxicity 4 (dermal) = Harmful in contact with skin.

Acute toxicity (inhalative): Lack of data.

Skin corrosion/irritation, eye damage/irritation: Skin Corrosion 1B = Causes severe skin burns and eye damage.

Sensitisation to the respiratory tract: Lack of data.

Skin sensitisation: Sensitization - skin 1 = May cause an allergic skin reaction.

Germ cell mutagenicity/Genotoxicity: Lack of data.

Carcinogenicity: Lack of data.

Reproductive toxicity: Lack of data.

Effects on or via lactation: Lack of data.

Specific target organ toxicity (single exposure): Lack of data.

Specific target organ toxicity (repeated exposure): Lack of data.

Aspiration hazard: Lack of data.

### General remarks

Information about triethylentetramine:

Acute oral toxicity: LD50, Rat: 1716 mg/kg

Acute dermal toxicity: LD50, Rabbit: 1465 mg/kg

## 12. Ecological information

### Ecotoxicity

Aquatic toxicity: Harmful to aquatic life with long lasting effects.

72 percent of the mixture consists of components of unknown hazards to the aquatic environment.

Information about triethylentetramine:

Algae toxicity: ErC50: 20 mg/L/72h (OECD 201).

Daphnia toxicity: EC10: 1.9 mg/L/21d (OECD 202).

Fish toxicity: LC50: 330 mg/L/96h (EPA).

### Mobility in soil

No data available

### Persistence and degradability

Further details: Product is not biodegradable.

### Additional ecological information

General information: Do not allow to penetrate into soil, waterbodies or drains. Do not allow uncontrolled discharge of product into the environment.

## 13. Disposal considerations

### Product

Recommendation: Dispose of waste according to applicable legislation. Dispose of as hazardous waste.

### Contaminated packaging

Recommendation: Dispose of waste according to applicable legislation. Handle contaminated packages in the same way as the substance itself. Uncontaminated packaging may be treated as household waste.

## 14. Transport information

### USA: Department of Transportation (DOT)

Identification number:	UN3264
Proper shipping name:	UN 3264, CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (triethylentetramine)
Hazard class or Division:	8
Packing Group:	II
Labels:	8
Symbols:	G
Special provisions:	B2, IB2, T11, TP2, TP27
Packaging – Exceptions:	154
Packaging – Non-bulk:	202
Packaging – Bulk:	242
Quantity limitations – Passenger aircraft / rail:	1 L
Quantity limitations – Cargo only:	30 L
Vessel stowage – Location:	B
Vessel stowage – Other:	40



### Canada: Transportation of Dangerous Goods (TDG)

UN Number:	UN3264
Shipping name:	UN 3264, CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (triethylentetramine)
TDG class:	8
Packing group:	II
Special provisions:	16
Explosive limit and limited quantity index:	1 L
Passenger carrying road or rail index:	1 L



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### Sea transport (IMDG)

UN number:	UN 3264
Proper shipping name:	UN 3264, CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (triethylentetramine)
Class or division, Subsidiary risk:	Class 8, Subrisk-
Packing Group:	II
EmS:	F-A, S-B
Special provisions:	274
Limited quantities:	1 L
Excepted quantities:	E2
Contaminated packaging - Instructions:	P001
Contaminated packaging - Provisions:	-
IBC - Instructions:	IBC02
IBC - Provisions:	-
Tank instructions - IMO:	-
Tank instructions - UN:	T11
Tank instructions - Provisions:	TP2, TP27
Stowage and handling:	Category B. SW2
Properties and observations:	Causes burns to skin, eyes and mucous membranes.
Marine pollutant:	no
Segregation group:	1

### Air transport (IATA)

UN/ID number:	UN 3264
Proper shipping name:	UN 3264, CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (triethylentetramine)
Class or division, Subsidiary risk:	Class 8
Packing Group:	II
Hazard label:	Corrosive
Excepted Quantity Code:	E2
Passenger and Cargo Aircraft: Ltd.Qty.:	Pack.Instr. Y840 - Max. Net Qty/Pkg. 0.5 L
Passenger and Cargo Aircraft:	Pack.Instr. 851 - Max. Net Qty/Pkg. 1 L
Cargo Aircraft only:	Pack.Instr. 855 - Max. Net Qty/Pkg. 30 L
Special provisions:	A3 A803
Emergency Response Guide-Code (ERG):	8L

## 15. Regulatory information

### National regulations - Canada

No data available

### National regulations - U.S. Federal Regulations

Triethylentetramine: TSCA Inventory: listed  
TSCA HPVC: not listed

### National regulations - U.S. State Regulations

Triethylentetramine: California Proposition 65 code: -  
Massachusetts Haz. Substance codes:  
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Pennsylvania Haz. Substance code: -

## 16. Other information

Text for labeling: Contains 13 - 30 % Triethylentetramine. Safety data sheet available on request.

Hazard rating systems:



NFPA Hazard Rating:

Health: 3 (Serious)

Fire: 1 (Slight)

Reactivity: 1 (Slight)

HMIS Version III Rating:

Health: 3 (Serious)

Flammability: 1 (Slight)

Physical Hazard: 1 (Slight)

Personal Protection: X = Consult your supervisor

HEALTH	<input type="checkbox"/>	3
FLAMMABILITY	<input type="checkbox"/>	1
PHYSICAL HAZARD	<input type="checkbox"/>	1
	<input checked="" type="checkbox"/>	X

Reason of change:

Changes in section 1: General revision

Date of first version:

13/Apr/2016

**Department issuing data sheet**

Contact person:

see section 1: Dept. responsible for information

The information in this data sheet has been established to our best knowledge and was up-to-date at time of revision. It does not represent a guarantee for the properties of the product described in terms of the legal warranty regulations.