# SAFETY DATA SHEET

WEICON

#### According to Work Health and Safety (WHS) Australia

WEICON A Epoxy Hardener

### Section 1. Identification

Product identifier	: WEICON A Epoxy Hardener
Product code	: 100002

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

Hardener for resins.

Supplier's details	: WEICON GmbH & Co. KG Königsberger Str. 255 48157 Münster Germany Phone: +49 251 93220 Fax: +49(0)251 / 9322 - 244 Internet: www.weicon.de	
e-mail address of person responsible for this SDS	: msds@weicon.de	
Emergency telephone number	: National Poison Information Center: Tel: 131126 TRANSPORT / EMERGENCY CONTACT (24h): Tel: +44 1865 407333 (English	ı)

# Section 2. Hazard(s) identification

Classification of the substance or mixture	ACUTE TOXICITY (inhalation) - Category 2 SKIN CORROSION/IRRITATION - Category 1 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1 SKIN SENSITIZATION - Category 1		
GHS label elements			
Hazard pictograms			
Signal word	: DANGER		
Hazard statements	: H314 - Causes severe skin burns and eye damage. H317 - May cause an allergic skin reaction. H330 - Fatal if inhaled.		
Precautionary statements			
Prevention	<ul> <li>P280 - Wear protective gloves, protective clothing and eye or face protection.</li> <li>P284 - Wear respiratory protection.</li> <li>P260 - Do not breathe vapor.</li> </ul>		
Response	<ul> <li>P304 + P340, P310 - IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor. P301 + P310, P330, P331 - IF SWALLOWED: Immediately call a POISON CENTER or doctor. Rinse mouth. Do NOT induce vomiting. P303 + P361 + P353, P310 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. Immediately call a POISON CENTER or doctor.</li> <li>P363 - Wash contaminated clothing before reuse.</li> <li>P302 + P352 - IF ON SKIN: Wash with plenty of water.</li> <li>P333 + P313 - If skin irritation or rash occurs: Get medical advice or attention.</li> <li>P305 + P351 + P338, P310 - IF IN EYES: Rinse cautiously with water for several minutes.</li> </ul>		
	minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor.		
Storage	Not applicable.		

# Section 2. Hazard(s) identification

Disposal	<ul> <li>P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.</li> </ul>
Supplemental label elements	: Not applicable.

Other hazards which do not : None known. result in classification

### Section 3. Composition and ingredient information

Substance/mixture

: Mixture

Ingredient name	% (w/w)	CAS number	Classification
Triethylenetetramine, propoxylated	≥10 - ≤30	26950-63-0	ACUTE TOXICITY (dermal) - Category 4 SKIN CORROSION/ IRRITATION - Category 2 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A SKIN SENSITIZATION - Category 1
3,6-diazaoctanethylenediamin	≥10 - ≤17	112-24-3	ACUTE TOXICITY (oral) - Category 4 ACUTE TOXICITY (dermal) - Category 4 ACUTE TOXICITY (inhalation) - Category 2 SKIN CORROSION/ IRRITATION - Category 1A SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A SKIN SENSITIZATION - Category 1
2,4,6-tris(dimethylaminomethyl)phenol	≤3	90-72-2	ACUTE TOXICITY (oral) - Category 4 SKIN CORROSION/ IRRITATION - Category 2 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A

There are no ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

### Section 4. First aid measures

#### Description of necessary first aid measures

Eye contact

: Get medical attention immediately. Call a poison center or physician. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician.

# Section 4. First aid measures

Inhalation	: Get medical attention immediately. Call a poison center or physician. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
Skin contact	: Get medical attention immediately. Call a poison center or physician. Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.
Ingestion	: Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Chemical burns must be treated promptly by a physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

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

Potential acute health effe	ts
Eye contact	: Causes serious eye damage.
Inhalation	: Fatal if inhaled.
Skin contact	: Causes severe burns. May cause an allergic skin reaction.
Ingestion	: No known significant effects or critical hazards.
<u>Over-exposure signs/sym</u>	toms
Eye contact	: Adverse symptoms may include the following: pain watering redness
Inhalation	: No specific data.
Skin contact	: Adverse symptoms may include the following: pain or irritation redness blistering may occur
Ingestion	: Adverse symptoms may include the following: stomach pains
Indication of immediate me	ical attention and special treatment needed, if necessary
Notes to physician	: In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
Specific treatments	: No specific treatment.
Protection of first-aiders	: No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

### Section 4. First aid measures

See toxicological information (Section 11)

### Section 5. Fire-fighting measures

Extinguishing media	
Suitable extinguishing media	: Use an extinguishing agent suitable for the surrounding fire.
Unsuitable extinguishing media	: None known.
Specific hazards arising from the chemical	: In a fire or if heated, a pressure increase will occur and the container may burst.
Hazardous thermal decomposition products	: Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides
Special protective actions for fire-fighters	: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
Special protective equipment for fire-fighters	<ul> <li>Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.</li> </ul>
Hazchem code	: 2X

### Section 6. Accidental release measures

#### Personal precautions, protective equipment and emergency procedures

For non-emergency personnel	:	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
For emergency responders	:	If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
Environmental precautions	:	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
Methods and materials for co	nt	ainment and cleaning up
Small spill	:	Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a

### Section 7. Handling and storage

#### Precautions for safe handling

Protective measures	: Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Keep away from acids. Empty containers retain product residue and can be hazardous. Do not reuse container.
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licensed waste disposal contractor.

# Section 7. Handling and storage

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Advice on general occupational hygiene	:	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
Conditions for safe storage, including any incompatibilities	:	Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Separate from acids. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

### Section 8. Exposure controls and personal protection

#### **Control parameters**

#### **Occupational exposure limits**

Ingredient name		Exposure limits	
3,6-diazaoctanethylenediamin		DFG MAC-values list (Germany, 7/2019). Skin sensitizer.	
Appropriate engineering controls	ventilation or other enginee	: Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.	
Environmental exposure controls	they comply with the require cases, fume scrubbers, filte	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.	
ndividual protection measu	ires		
Hygiene measures	eating, smoking and using t Appropriate techniques sho Contaminated work clothing	face thoroughly after handling chemical products, before the lavatory and at the end of the working period. ould be used to remove potentially contaminated clothing. g should not be allowed out of the workplace. Wash re reusing. Ensure that eyewash stations and safety prkstation location.	
Eye/face protection	assessment indicates this is gases or dusts. If contact is unless the assessment indi	: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles and/or face shield. If inhalation hazards exist, a full-face respirator may be required instead.	
Skin protection			
Hand protection	: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. Recommended : 1 - 4 hours (breakthrough time): nitrile rubber ; 4 - 8 hours (breakthrough time): Viton®/butyl rubber		
Body protection	<ul> <li>Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.</li> </ul>		

### Section 8. Exposure controls and personal protection

Other skin protection	<ul> <li>Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.</li> </ul>
Respiratory protection	: Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use. Recommended : organic vapor (Type AX) and particulate filter

# Section 9. Physical and chemical properties

<u>Appearance</u>	
Physical state	: Liquid.
Color	: Green.
Odor	: Bland.
Odor threshold	: Not available.
рН	: 11 to 12 [Conc. (% w/w): 50%]
Melting point	: Not available.
Boiling point	: >200°C (>392°F)
Flash point	: Closed cup: >100°C (>212°F) [Pensky-Martens.]
Evaporation rate	: Not available.
Flammability (solid, gas)	: Not available.
Lower and upper explosive (flammable) limits	: Not available.
Vapor pressure	: Not available.
Vapor density	: Not available.
Relative density	: Not available.
Density	: 1.6 g/cm <sup>3</sup> [23°C]
Solubility	: Soluble in the following materials: cold water and hot water.
Solubility in water	: Not available.
Partition coefficient: n- octanol/water	: Not available.
Auto-ignition temperature	: Not applicable.
Decomposition temperature	: Not available.
Viscosity	: Not available.
Flow time (ISO 2431)	: Not available.

# Section 10. Stability and reactivity

Reactivity	: No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	: The product is stable.
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	: No specific data.
Incompatible materials	: Reactive or incompatible with the following materials: acids
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

# Section 11. Toxicological information

#### Information on toxicological effects

#### Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
3,6-diazaoctanethylenediamin	LD50 Dermal	Rabbit	805 mg/kg	-
	LD50 Oral	Rat	2500 mg/kg	-
2,4,6-tris (dimethylaminomethyl) phenol	LD50 Dermal	Rat	1280 mg/kg	-
	LD50 Oral	Rat	1673 mg/kg	-

#### Acute toxicity estimates

Route	
Oral	4717.99 mg/kg
Dermal	3492.06 mg/kg
Inhalation (dusts and mists)	0.5 mg/l

#### Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
3,6-diazaoctanethylenediamin	Eyes - Moderate irritant	Rabbit	-	24 hours 20	-
				mg	
	Eyes - Severe irritant	Rabbit	-	49 mg	-
	Skin - Severe irritant	Rabbit	-	24 hours 5	-
				mg	
	Skin - Severe irritant	Rabbit	-	490 mg	-
2,4,6-tris	Eyes - Severe irritant	Rabbit	-	24 hours 50	-
(dimethylaminomethyl)				ug	
phenol					
	Skin - Mild irritant	Rat	-	0.025 MI	-
	Skin - Severe irritant	Rat	-	0.25 MI	-
	Skin - Severe irritant	Rabbit	-	24 hours 2	-
				mg	

#### Sensitization

Not available.

#### **Mutagenicity**

Not available.

#### **Carcinogenicity**

Not available.

#### Reproductive toxicity

Not available.

#### Teratogenicity

Not available.

#### Specific target organ toxicity (single exposure)

Not available.

#### Specific target organ toxicity (repeated exposure)

Not available.

#### Aspiration hazard

Not available.

# Section 11. Toxicological information

Information on the likely routes of exposure	Not available.	
Potential acute health effects		
Eye contact	Causes serious eye damage.	
Inhalation	Fatal if inhaled.	
Skin contact	Causes severe burns. May cause an allergic skin reaction.	
Ingestion	No known significant effects or critical hazards.	
Symptoms related to the phy	al, chemical and toxicological characteristics	
Eye contact	Adverse symptoms may include the following: pain watering redness	
Inhalation	No specific data.	
Skin contact	Adverse symptoms may include the following: pain or irritation redness blistering may occur	
Ingestion	Adverse symptoms may include the following: stomach pains	
Delayed and immediate effect	and also chronic effects from short and long term exposure	
Short term exposure		
Potential immediate effects	Not available.	
Potential delayed effects	Not available.	
<u>Long term exposure</u>		
Potential immediate effects	Not available.	
Potential delayed effects	Not available.	
Potential chronic health eff		
Not available.		
General	Once sensitized, a severe allergic reaction may occur when subsequently exposito very low levels.	sed
Carcinogenicity	No known significant effects or critical hazards.	
Mutagenicity	No known significant effects or critical hazards.	
Teratogenicity	No known significant effects or critical hazards.	
Developmental effects	No known significant effects or critical hazards.	
Fertility effects	No known significant effects or critical hazards.	

#### Numerical measures of toxicity

#### Acute toxicity estimates

Product/ingredient name	Oral (mg/ kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapors) (mg/l)	Inhalation (dusts and mists) (mg/l)
WEICON A Epoxy Hardener	4718	3492.1	N/A	N/A	0.5
Triethylenetetramine, propoxylated	N/A	1100	N/A	N/A	N/A
3,6-diazaoctanethylenediamin	500	1100	N/A	N/A	0.05
2,4,6-tris(dimethylaminomethyl)phenol	1673	N/A	N/A	N/A	N/A

# Section 11. Toxicological information

# Section 12. Ecological information

#### **Toxicity**

Product/ingredient name	Result	Species	Exposure
3,6-diazaoctanethylenediamin	Acute EC50 3700 μg/l Fresh water	Algae - Pseudokirchneriella subcapitata	96 hours
	Acute LC50 33900 μg/l Fresh water	Daphnia - Daphnia magna	48 hours

#### Persistence and degradability

Not available.

#### **Bioaccumulative potential**

Product/ingredient name	LogPow	BCF	Potential
3,6-diazaoctanethylenediamin 2,4,6-tris (dimethylaminomethyl)phenol	0.219	-	low low

#### Mobility in soil

Soil/water partition	: Not available.
coefficient (Koc)	

**Other adverse effects** : No known significant effects or critical hazards.

### Section 13. Disposal considerations

**Disposal methods** : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

### Section 14. Transport information

	ADG	ADR/RID	IMDG	ΙΑΤΑ
UN number	UN2735	UN2735	UN2735	UN2735
UN proper shipping name	AMINES, LIQUID, CORROSIVE, N.O.S.	AMINES, LIQUID, CORROSIVE, N.O.S. (3,6-diazaoctanethylenediamin)	AMINES, LIQUID, CORROSIVE, N.O.S. (3,6-diazaoctanethylenediamin)	Amines, liquid, corrosive, n.o.s. (3,6-diazaoctanethylenediamin)
Transport hazard class(es)	8	8	8	8
Packing group				
Date of issue/Date of revi	ision : 08.06.2020	Date of previous issue	: 04.06.2020	Version : 1.01 9/11

### Section 14. Transport information

Environmental hazards	No.	No.	No.	No.
Additional information				

#### Additional information

ADG	<u>zchem code</u> 2X <u>ecial provisions</u> 223, 274	
ADR/RID	<u>zard identification number</u> 80 <u>nited quantity</u> 5 L <u>ecial provisions</u> 274 <u>nnel code</u> (Ε)	
IMDG	<u>nergency schedules</u> F-A, S-B <u>ecial provisions</u> 223, 274	
ΙΑΤΑ	antity limitation Passenger and Cargo Aircraft: 5 L. Packaging rgo Aircraft Only: 60 L. Packaging instructions: 856. Limited Qua ssenger Aircraft: 1 L. Packaging instructions: Y841. ecial provisions A3, A803	
Special precautions for user	ansport within user's premises: always transport in closed corright and secure. Ensure that persons transporting the product kine event of an accident or spillage.	

Transport in bulk according : Not available. to IMO instruments

### Section 15. Regulatory information

#### Standard for the Uniform Scheduling of Medicines and Poisons

Not regulated.

#### Model Work Health and Safety Regulations - Scheduled Substances

No listed substance

#### International regulations

### Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

#### **Montreal Protocol**

Not listed.

#### Stockholm Convention on Persistent Organic Pollutants

Not listed.

#### Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

#### **UNECE Aarhus Protocol on POPs and Heavy Metals**

Not listed.

#### Inventory list

Australia	: All components are listed or exempted.
Canada	: All components are listed or exempted.
China	: All components are listed or exempted.
Europe	: All components are listed or exempted.
Japan	: Japan inventory (ENCS): Not determined. Japan inventory (ISHL): Not determined.
New Zealand	: All components are listed or exempted.
Philippines	: Not determined.
Republic of Korea	: All components are listed or exempted.

## Section 15. Regulatory information

Taiwan	: All components are listed or exempted.
Thailand	: Not determined.
Turkey	: All components are listed or exempted.
United States	: All components are active or exempted.
Viet Nam	: All components are listed or exempted.

### Section 16. Any other relevant information

<u>History</u>	
Date of printing	: 09.06.2020
Date of issue/Date of revision	: 08.06.2020
Date of previous issue	: 04.06.2020
Version	: 1.01
Key to abbreviations	<ul> <li>ADG = Australian Dangerous Goods ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor GHS = Globally Harmonized System of Classification and Labelling of Chemicals IATA = International Air Transport Association IBC = Internediate Bulk Container IMDG = International Maritime Dangerous Goods LogPow = logarithm of the octanol/water partition coefficient MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution) N/A = Not available SGG = Segregation Group SUSMP = Standard Uniform Schedule of Medicine and Poisons UN = United Nations</li> </ul>

#### Procedure used to derive the classification

Classification	Justification
ACUTE TOXICITY (inhalation) - Category 2	Calculation method
SKIN CORROSION/IRRITATION - Category 1	On basis of test data
SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1	On basis of test data
SKIN SENSITIZATION - Category 1	Calculation method

References : Not available.

Indicates information that has changed from previously issued version.

#### Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the abovenamed supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.