SAFETY DATA SHEET

WEICON

According to Work Health and Safety (WHS) Australia

WEICON C Epoxy Hardener

Section 1. Identification

Product identifier	: WEICON C Epoxy Hardener
Product code	: 101002

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	Distributor's details :	Swift Supplies Online Pty Ltd Phone: +61 7 3180 8824 swiftsupplies.com.au
e-mail address of person responsible for this SDS	: msds@weicon.de		
Emergency telephone number	: National Poison Information TRANSPORT / EMERGENCY		44 1865 407333 (English)

TRANSPORT / EMERGENCY CONTACT (24h): Tel: +44 1865 407333 (English)

Section 2. Hazard(s) identification

Classification of the	: ACUTE TOXICITY (oral) - Category 4
substance or mixture	SKIN CORROSION/IRRITATION - Category 1B SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1 SKIN SENSITIZATION - Category 1
GHS label elements	
Hazard pictograms	
Signal word	DANGER
Hazard statements	: H302 - Harmful if swallowed. H314 - Causes severe skin burns and eye damage. H317 - May cause an allergic skin reaction.
Precautionary statements	
Prevention	 P280 - Wear protective gloves, protective clothing and eye or face protection. P261 - Avoid breathing vapor. P270 - Do not eat, drink or smoke when using this product. P264 - Wash thoroughly after handling.
Response	 P304 + P310 - IF INHALED: 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. P363 - Wash contaminated clothing before reuse. P302 + P352 - IF ON SKIN: Wash with plenty of water. P333 + P313 - If skin irritation or rash occurs: Get medical advice or attention. P305 + P351 + P338, P310 - 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 or doctor.

Section 2. Hazard(s) identification

Disposal	: P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.
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
3-aminomethyl-3,5,5-trimethylcyclohexylamine	≥10 - ≤30	2855-13-2	ACUTE TOXICITY (oral) - Category 4 ACUTE TOXICITY (dermal) - Category 4 SKIN CORROSION/ IRRITATION - Category 1B SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1 SKIN SENSITIZATION - Category 1
m-phenylenebis(methylamine)	≥10 - ≤22	1477-55-0	ACUTE TOXICITY (oral) - Category 4 ACUTE TOXICITY (inhalation) - Category 4 SKIN CORROSION/ IRRITATION - Category 1B SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1 SKIN SENSITIZATION - Category 1
1-methylimidazole	≤10	616-47-7	ACUTE TOXICITY (oral) - Category 4 ACUTE TOXICITY (dermal) - Category 4 SKIN CORROSION/ IRRITATION - Category 1B SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1

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 effec	<u>ts</u>	
Eye contact	:	Causes serious eye damage.
Inhalation	:	No known significant effects or critical hazards.
Skin contact	:	Causes severe burns. May cause an allergic skin reaction.
Ingestion	:	Harmful if swallowed.
<u>Over-exposure signs/symp</u>	ton	<u>15</u>
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 med	ica	I 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.

 Date of issue/Date of revision
 : 04.06.2020
 Date of previous issue
 : No previous validation
 Version
 : 1
 3/11

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	 Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
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
licensed waste disposal contractor.

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. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
-----------------------	--

4/11

Section 7. Handling and storage

	-	_
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. 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	Exposure limits DFG MAC-values list (Germany, 7/2019). Skin sensitizer.	
3-aminomethyl-3,5,5-trimet			
m-phenylenebis(methylami	Safe Work Australia (Australia, 4/2018 Absorbed through skin. PEAK: 0.1 mg/m³	3).	
Appropriate engineering controls	If user operations generate dust, fumes, gas, vapor or mist, use process enclo local exhaust ventilation or other engineering controls to keep worker exposure airborne contaminants below any recommended or statutory limits.	sures e to	
Environmental exposure controls	Emissions from ventilation or work process equipment should be checked to e they comply with the requirements of environmental protection legislation. In s cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.		
Individual protection meas			
Hygiene measures	Wash hands, forearms and face thoroughly after handling chemical products, I eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clo Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safet showers are close to the workstation location.	othing h	
Eye/face protection	Safety eyewear complying with an approved standard should be used when a rassessment indicates this is necessary to avoid exposure to liquid splashes, m gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splas goggles and/or face shield. If inhalation hazards exist, a full-face respirator marequired instead.	nists, sh	
Skin protection			
Hand protection	Chemical-resistant, impervious gloves complying with an approved standard sl be worn at all times when handling chemical products if a risk assessment indi this is necessary. Considering the parameters specified by the glove manufact 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®/I rubber	icates turer, t	

Section 8. Exposure controls and personal protection

Body protection	 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.
Other skin protection	 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.
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	Yellowish.
Odor	Bland.
Odor threshold	Not available.
рН	Not available.
Melting point	Not available.
Boiling point	>200°C (>392°F)
Flash point	Closed cup: 106°C (222.8°F)
Evaporation rate	Not available.
Flammability (solid, gas)	Not available.
Lower and upper explosive (flammable) limits	Not available.
Vapor pressure	0.002 kPa (0.015001 mm Hg) [room temperature]
Vapor density	Not available.
Relative density	Not available.
Density	1.01 g/cm³ [25°C]
Solubility	Insoluble 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 available.
Decomposition temperature	Not available.
Viscosity	Dynamic (room temperature): 800 to 16000 mPa·s (800 to 16000 cP)
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	: No specific data.

Section 10. Stability and reactivity

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
m-phenylenebis (methylamine)	LD50 Dermal	Rabbit	2 g/kg	-
	LD50 Oral	Rat	930 mg/kg	-

Acute toxicity estimates

	Route	
Oral		1313.74 mg/kg
Dermal		4150.94 mg/kg
Inhalation (dusts an	d mists)	5.13 mg/l

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
m-phenylenebis (methylamine)	Eyes - Severe irritant	Rabbit	-	24 hours 50 ug	-
	Skin - Severe irritant	Rabbit	-	24 hours 750 ug	-

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.

Information on the likely : Not available.

routes of exposure

i otomina acato mounti onocio	Potential	acute	health	effects
-------------------------------	------------------	-------	--------	---------

Ingestion	: Harmful i	f swallowed.		
Skin contact	: Causes s	evere burns. May cause a	n allergic skin reaction.	
Inhalation	: No knowr	n significant effects or critic	al hazards.	
Eye contact	: Causes s	erious eye damage.		

7/11

Section 11. Toxicological information

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms related to the phy	cal, 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	
<u>Short term exposure</u>		
Potential immediate effects	Not available.	
Potential delayed effects	Not available.	
Long term exposure		
Potential immediate effects	Not available.	
Potential delayed effects	Not available.	
Potential chronic health effe	<u>s</u>	
Not available.		
General	Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.	
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 C Epoxy Hardener	1313.7	4150.9	N/A	N/A	5.1
3-aminomethyl-3,5,5-trimethylcyclohexylamine	500	1100	N/A	N/A	N/A
m-phenylenebis(methylamine)	930	N/A	N/A	N/A	1.5
1-methylimidazole	500	1100	N/A	N/A	N/A

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
3-aminomethyl- 3,5,5-trimethylcyclohexylamine	Acute EC50 17.4 mg/l Fresh water	Daphnia - Daphnia magna	48 hours

Persistence and degradability

Not available.

Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
3-aminomethyl-	0.99	-	low
3,5,5-trimethylcyclohexylamine			
m-phenylenebis	0.18	2.69	low
(methylamine)			
1-methylimidazole	-0.06	-	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. (m-phenylenebis (methylamine))	AMINES, LIQUID, CORROSIVE, N.O.S. (m-phenylenebis (methylamine))	AMINES, LIQUID, CORROSIVE, N.O.S. (m-phenylenebis (methylamine))	Amines, liquid, corrosive, n.o.s. (m- phenylenebis (methylamine))
Transport hazard class(es)	8	8	8	8
Packing group	11	11	П	11
Environmental hazards	No.	No.	No.	No.

Section 14. Transport information

•		
Additional information		
ADG	:	<u>Hazchem code</u> 2X <u>Special provisions</u> 274
ADR/RID	:	Hazard identification number 80 Limited quantity 1 L Special provisions 274 Tunnel code (E)
IMDG	:	<u>Emergency schedules</u> F-A, S-B <u>Special provisions</u> 274
ΙΑΤΑ	:	Quantity limitation Passenger and Cargo Aircraft: 1 L. Packaging instructions: 851. Cargo Aircraft Only: 30 L. Packaging instructions: 855. Limited Quantities - Passenger Aircraft: 0.5 L. Packaging instructions: Y840. Special provisions A3, A803
Special precautions for user	:	Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.
Transport in bulk according	:	Not available.

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

to IMO instruments

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): All components are listed or exempted. Japan inventory (ISHL): Not determined.
New Zealand	: All components are listed or exempted.
Philippines	: All components are listed or exempted.
Republic of Korea	: All components are listed or exempted.
Taiwan	: All components are listed or exempted.
Thailand	: Not determined.

Section 15. Regulatory information

Turkey	
United States	
Viot Nam	

- : Not determined.
- : 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	: 04.06.2020
Date of issue/Date of revision	: 04.06.2020
Date of previous issue	: No previous validation
Version	: 1
Key to abbreviations	 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

Procedure used to derive the classification

Classification	Justification
ACUTE TOXICITY (oral) - Category 4	Calculation method
SKIN CORROSION/IRRITATION - Category 1B	Calculation method
SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1	Calculation method
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.