



SAFETY DATA SHEET

in accordance with 29 CFR 1910.1200 and ANSI standard Z400.1-2010

Revision date: Nov/10/2015

Version: 1

Language: en-US

Date of print: Nov/13/2015

Plastic-Metal C Hardener

Article number 101002

Page: 1 of 10

1. Product and company identification

Product identifier

Trade name: Plastic-Metal C Hardener

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

General use: Two-component epoxy resins, hardener component. Reserved for industrial and professional use.

Details of the supplier of the safety data sheet

Company name: Weicon GmbH & Co. KG

Street/POB-No.: Königsberger Str. 255

Postal Code, city: 48157 Münster

Germany

WWW: www.weicon.de

E-mail: info@weicon.de

Telephone: +49 (0)251- 93 22-0

Telefax: +49 (0)251- 93 22-244

Dept. responsible for information:

Product-Safety-Department

Telephone: +49(0)251 / 9322 - 0, Email: msds@weicon.de

Emergency phone number

GLZ, Bonn (Germany)

Telephone: +49(0)228 / 19 240

2. Hazards identification

Emergency overview

Appearance: Physical state at 68 °F and 101.3 kPa: liquid

Color: light yellow

Odor: slightly perceptible

Classification: Acute Toxicity - oral - Category 4; Skin Corrosion - Category 1B;
Sensitization - skin - Category 1; Aquatic toxicity - chronic - Category 3;

Hazard symbols:



Signal word: **Danger**

Hazard statements: Harmful if swallowed.

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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Precautionary statements: Keep out of reach of children.
Do not breathe vapors.
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): Remove/Take off immediately all contaminated clothing. Rinse skin with water/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).
If skin irritation or rash occurs: Get medical advice/attention.
Take off contaminated clothing and wash it 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

see section 11: Toxicological information

3. Composition / Information on ingredients

Chemical characterization: Aliphatic and cycloaliphatic amines

Hazardous ingredients:

CAS No.	Designation	Content	Classification
CAS 2855-13-2	3-Aminomethyl-3,5,5-trimethylcyclohexylamine	13 - 30 %	Acute Toxicity - oral - Category 4. Acute Toxicity - dermal - Category 4. Skin Corrosion - Category 1B. Sensitization - skin - Category 1. Aquatic toxicity - chronic - Category 3.
CAS 1477-55-0	m-Phenylenebis(methylamine)	13 - 30 %	Acute Toxicity - oral - Category 4. Acute Toxicity - inhalative - Category 4. Skin Corrosion - Category 1B. Sensitization - skin - Category 1. Aquatic toxicity - chronic - Category 3.
CAS 616-47-7	1-Methylimidazole	3 - 7 %	Acute Toxicity - oral - Category 4. Acute Toxicity - dermal - Category 4. Skin Corrosion - Category 1B.

4. First aid measures

General information: First aider: Pay attention to self-protection!
Take off immediately all contaminated clothing and wash it before reuse.

In case of inhalation: Provide fresh air. When inhaling vapors, first symptoms of poisoning may develop hours later, so always consult a doctor.
Move victim to fresh air; if necessary, provide artificial respiration or oxygen.



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- Following skin contact: After contact with skin, wash immediately with soap and plenty of water. Immediately get medical attention. In case of skin irritation, consult a physician.
- 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. Immediate transport to an eye specialist (continue rinsing during transport)
- After swallowing: Do not induce vomiting. Aspiration hazard: in case of swallowing or vomiting danger of penetration into the lungs. If victim is at risk of losing consciousness, position and transport on their side. Rinse mouth immediately and drink plenty of water. Never give anything by mouth to an unconscious person. Immediately get medical attention.

Most important symptoms/effects, acute and delayed

Causes severe skin burns and eye damage. Harmful if inhaled. May cause an allergic skin reaction. Respiratory complaints, vomiting, abdominal pain, headache, allergic reactions, nausea, gastrointestinal complaints, skin irritations

Information to physician

Symptoms of poisoning can only emerge after several hours; medical supervision is therefore essential for at least 48 hours. Treat symptomatically.

5. Fire fighting measures

Flash point/flash point range:

222.8 °F (c.c.)

Auto-ignition temperature: no data available

Suitable extinguishing media:

Water fog, carbon dioxide, foam, dry chemical powder

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 (NO_x), carbon monoxide and carbon dioxide.

Protective equipment and precautions for firefighters:

Wear self-contained positive pressure breathing apparatus and full firefighting protective clothing.

Do not inhale explosion and combustion gases.

Additional information:

Cool endangered containers with water jetspray. Do not allow fire water to penetrate into surface or ground water.

6. Accidental release measures

Personal precautions:

Provide adequate ventilation. Do not breathe fume/gas/mist/vapors/spray. Take off immediately all contaminated clothing and wash it before reuse. Avoid contact with the substance. Eliminate all ignition sources if safe to do so. Wear protective equipment. Wear respiratory protection when in the presence of vapor, dust, and aerosols. Keep unprotected people away.

Environmental precautions:

Do not allow to enter into ground-water, surface water or drains. In case of release, notify competent authorities.

Methods for clean-up:

Isolate leaked material using non-flammable absorption agent (e.g. sand, earth, vermiculit, diatomaceous earth) and collect it for disposal in appropriate containers in accordance with the local regulations (see section 13).



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7. Handling and storage

Handling

Advices on safe handling: Provide adequate ventilation, and local exhaust as needed.
If necessary: Execute works under fume hood.
Avoid the formation of aerosol.
Do not breathe fume/gas/mist/vapors/spray. Avoid contact with skin and eyes.
Handle and open container with care. Wear protective equipment.
Take off immediately all contaminated clothing and wash it before reuse.

Precautions against fire and explosion:
Keep away from sources of ignition. - No smoking.
Usual measures for fire prevention.

Storage

Requirements for storerooms and containers:
Keep container tightly closed in a cool, well-ventilated place. Keep container dry.
Protect from heat and direct sunlight. Handle and open container with care.
Keep only in original container. storage temperature: 35.6 °F up to 104 °F. Store containers in upright position.

Hints on joint storage: Keep away from: Strong acids, strong bases, strong oxidizing agents, metals.
Keep away from food, drink and animal feedingstuffs.

Further details: Store locked up.

8. Exposure controls / personal protection

Exposure guidelines

Occupational exposure limit values:

CAS No.	Designation	Type	Limit value
1477-55-0	m-Phenylenebis (methylamine)	ACGIH: Ceiling	0.1 mg/m ³ (May be absorbed through the skin.)
		NIOSH: Ceiling	0.1 mg/m ³ (May be absorbed through the skin.)

Engineering controls

Provide adequate ventilation.
If necessary: Execute works under fume hood.
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, Nitrile rubber.
Breakthrough time: < 480 min
Observe glove manufacturer's instructions concerning penetrability and breakthrough time.



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Respiratory protection: Respiratory protection must be worn whenever the TLV (WEL) levels have been exceeded.
The filter class must be suitable for the maximum contaminant concentration (gas/vapor/aerosol/particulates) that may arise when handling the product.
If higher concentrations occur: Wear self-contained breathing apparatus.

General hygiene considerations:
Keep away from sources of ignition. - No smoking.
Avoid contact with skin and eyes.
Take off immediately all contaminated clothing.
Do not breathe vapors.
Wash hands before breaks and after work.
Safety shower and eye wash station should be easily accessible to the work area.

9. Physical and chemical properties

Information on basic physical and chemical properties

Appearance: Physical state at 68 °F and 101.3 kPa: liquid
Color: light yellow

Odor: slightly perceptible
Odor threshold: no data available

pH value: not determined

Melting point/freezing point: no data available
Initial boiling point and boiling range: > 392 °F
Flash point/flash point range: 222.8 °F (c.c.)
Evaporation rate: no data available

Flammability: no data available
Explosion limits: LEL (Lower Explosion Limit): not determined
UEL (Upper Explosive Limit): not determined

Vapor pressure: at 68 °F: <= 0.002 kPa
Vapor density: no data available
Density: at 77 °F: 1.01 g/mL

Water solubility: at 68 °F: practically insoluble
Partition coefficient: n-octanol/water: no data available

Auto-ignition temperature: no data available
Thermal decomposition: > 392 °F

Viscosity, dynamic: at 77 °F: 800 - 1600 mPa*s
Viscosity, kinematic: not determined

10. Stability and reactivity

Reactivity: Corrosive to most metals.

Chemical stability: Stable under recommended storage conditions.

Possibility of hazardous reactions
Violent reaction with oxidizing agents and acids. With nitrosic agents (such as nitric salts or nitric oxides) under special conditions may form nitrosamines.

Conditions to avoid: Keep away from heat sources, sparks and open flames.
Protect against direct sunlight.
Protect from moisture contamination.

Incompatible materials: Strong oxidizing agents, strong acids, strong bases, metals.



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Hazardous decomposition products:

Hazardous vapors may form during fires.

In case of fire may be liberated:

Nitrogen oxides (NOx), carbon monoxide and carbon dioxide.

Thermal decomposition: > 392 °F

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 - oral - Category 4 = Harmful if swallowed.
ATEmix (calculated): 300 mg/kg < ATE ≤ 2000 mg/kg.

Acute toxicity (dermal): Based on available data, the classification criteria are not met.
ATEmix (calculated): > 2000 mg/kg.

Acute toxicity (inhalative): Based on available data, the classification criteria are not met.
ATEmix (calculated): > 5 mg/L.

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

Information about 3-Aminomethyl-3,5,5-trimethylcyclohexylamine:
Specific symptoms in animal studies (Rabbit): corrosive (OECD 404)

Information about m-Phenylenebis(methylamine):
Specific symptoms in animal studies (Rabbit): corrosive (OECD 404)

Information about m-Phenylenebis(methylamine):
Specific symptoms in animal studies (Rabbit): corrosive (OECD 404)

Information about 3-Aminomethyl-3,5,5-trimethylcyclohexylamine:
Specific symptoms in animal studies (Rabbit): corrosive (OECD 405)

Information about m-Phenylenebis(methylamine):
Specific symptoms in animal studies (Rabbit): corrosive (OECD 405)

Information about m-Phenylenebis(methylamine):
Specific symptoms in animal studies (Rabbit): corrosive (OECD 405)

Sensitisation to the respiratory tract: Lack of data.

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

Information about 3-Aminomethyl-3,5,5-trimethylcyclohexylamine:
Specific symptoms in animal studies (guinea pig): sensitising (OECD 406)

Information about m-Phenylenebis(methylamine):
Specific symptoms in animal studies (guinea pig): sensitising (OECD 406)

Information about m-Phenylenebis(methylamine):
Specific symptoms in animal studies (guinea pig): sensitising (OECD 406)

Germ cell mutagenicity/Genotoxicity: Lack of data.

Information about 3-Aminomethyl-3,5,5-trimethylcyclohexylamine:
in vivo mutagenicity (mammalian cell test): negative (in micronucleus test)
No evidence of mutagenous activity (Ames test).

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.



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Other information: 3-Aminomethyl-3,5,5-trimethylcyclohexylamine:
LD50 Rat, oral: 1030 mg/kg (OECD 402).
m-Phenylenebis(methylamine):
LC50 Rat, inhalative: 1,34 mg/L Aerosol (OECD 403)
LC50 Rat (female), inhalative: 0,8 mg/L Aerosol (OECD 403)
1-Methylimidazole:
LD50 Rat, oral: 1144 mg/kg; LD50 Rabbit, dermal: 400 - 640 mg/kg (OECD 402).

Symptoms

In case of inhalation:
Mucous membrane irritation, cough, shortage of breath, damage of respiratory tract.
In case of ingestion:
If swallowed, severe burns in the oral cavity and throat as well as danger of perforation of the digestive tract and stomach.
After contact with skin: 1-Methylimidazole: Danger of cutaneous absorption. burns, redness, pain.
After eye contact: Irritant and corrosive effects. May cause blindness.

12. Ecological information

Ecotoxicity

Aquatic toxicity: Harmful to aquatic life with long lasting effects.
Information about 3-Aminomethyl-3,5,5-trimethylcyclohexylamine:
Algae toxicity:
EC50 *Desmodesmus subspicatus* (green algae): > 50 mg/L/72h (EU C.3).
Daphnia toxicity:
EC50 *Daphnia magna* (Big water flea): 23 mg/L/48h (OECD 202).
Fish toxicity:
LC50 *Leuciscus idus*: 110 mg/L/96 h (EU C.1).
Information about m-Phenylenebis(methylamine):
Algae toxicity:
EC50 *Desmodesmus subspicatus* (green algae): 30.3 mg/L/72h (OECD 201).
Daphnia toxicity:
EC50 *Daphnia magna* (Big water flea): 12.3 mg/L/48h - 18.7 mg/L/48h (OECD 202).
Fish toxicity:
LC50 *Oryzias latipes* (Ricefish) 87.6 mg/L/96h (OECD 203).
Further details: Information about 3-Aminomethyl-3,5,5-trimethylcyclohexylamine:
Biodegradation: < 10 %/28 d (OECD 301 E).
Product is biodegradable with difficulty.
Information about m-Phenylenebis(methylamine):
Biodegradation: 49 %/28 d (OECD 301 B).
Product is not readily biodegradable.
Information about 1-Methylimidazole:
Biodegradation: 0 - 10 %/28 d (OECD 301 F/B).
Product is biodegradable with difficulty.

Mobility in soil

no data available

Persistence and degradability

Further details: no data available



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Additional ecological information

Volatile organic compounds (VOC):

0 % by weight

General information:

Danger to drinking water when soaking into the soil or waters.

Do not allow to enter into ground-water, surface water or drains.

13. Disposal considerations

Product

Recommendation: Special waste. Incinerate according to applicable local, state and federal regulations.

Contaminated packaging

Recommendation: Non-contaminated packages may be recycled.

Handle contaminated packages in the same way as the substance itself.

14. Transport information

USA: Department of Transportation (DOT)

Identification numbers:

UN2735

Proper shipping name:

UN 2735, POLYAMINES, LIQUID, CORROSIVE, N.O.S.

(3-Aminomethyl-3,5,5-trimethylcyclohexylamine,
m-Phenylenebis(methylamine), 1-Methylimidazole)

DOT hazard class or division:

8

PG:

II

Label codes:

8

Symbols:

G

Special provisions:

B2, IB2, T11, TP1, 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:

A

Vessel stowage - Other:

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Sea transport (IMDG)

UN number: UN 2735
Proper shipping name: UN 2735, POLYAMINES, LIQUID, CORROSIVE, N.O.S.
(3-Aminomethyl-3,5,5-trimethylcyclohexylamine,
m-Phenylenebis(methylamine), 1-Methylimidazole)
Class 8, Subrisk -
IMDG: II
Packing Group: F-A, S-B
EmS: 274
Special provisions: 1 L
Limited quantities: E2
EQ: P001
Contaminated packaging - Instructions: -
Contaminated packaging - Provisions: IBC02
IBC - Instructions: -
IBC - Provisions: -
Tank instructions - IMO: T11
Tank instructions - UN: TP1, TP27
Tank instructions - Provisions: Category A.
Stowage and handling: SG35
Segregation: Colourless to yellowish liquids or solutions with a pungent odour. Miscible
with or soluble in water. When involved in a fire, evolve toxic gases.
Corrosive to most metals, especially to copper and its alloys. React
violently with acids. Cause burns to skin, eyes and mucous membranes.
Properties and observations: No
Marine pollutant: none
Segregation group:

Air transport (IATA)

UN/ID number: UN 2735
Proper shipping name: UN 2735, POLYAMINES, LIQUID, CORROSIVE, N.O.S.
(3-Aminomethyl-3,5,5-trimethylcyclohexylamine,
m-Phenylenebis(methylamine), 1-Methylimidazole)
Class 8
ICAO/IATA: II
PG: Corrosive
Hazard: E2
EQ: Pack.Instr. Y840 - Max. Net Qty/Pkg. 0.5 L
Passenger Ltd.Qty.: Pack.Instr. 851 - Max. Net Qty/Pkg. 1 L
Passenger: Pack.Instr. 855 - Max. Net Qty/Pkg. 30 L
Cargo: A3 A803
Special Provisioning: 8L
ERG:

15. Regulatory information

U.S. Federal Regulations

3-Aminomethyl-3,5,5-trimethylcyclohexylamine: TSCA Inventory: listed
TSCA HPVC: not listed
m-Phenylenebis(methylamine): TSCA: listed
1-Methylimidazole: TSCA Inventory: listed
TSCA HPVC: not listed

National regulations - Great Britain

Hazchem-Code: 2X



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16. Other information

Text for labeling: Contains 13 - 30 % 3-Aminomethyl-3,5,5-trimethylcyclohexylamine, 13 - 30 % m-Phenylenebis(methylamine), 3 - 7 % 1-Methylimidazole. Safety data sheet available on request.

Hazard rating systems:



NFPA Hazard Rating:

Health: 3 (Serious)

Fire: 1 (Slight)

Reactivity: 0 (Minimal)

HMIS Version III Rating:

Health: 3 (Serious)

Flammability: 1 (Slight)

Physical Hazard: 0 (Minimal)

Personal Protection: X = Consult your supervisor

HEALTH	3
FLAMMABILITY	1
PHYSICAL HAZARD	0
	X

Date of first version: Nov/10/2015

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.