



Safety Data Sheet according to Regulation (EC)

No. 1907/2006 (REACH)

Printed

07.01.2016

revision

17.12.2014 (GB) Version 8.1

WEICON WR Hardener

! SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Name of product

WEICON WR Hardener

Code-Nr. 103002

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

Recommended intended purpose(s)

2-Component Epoxy Resin - Hardener Component

1.3. Details of the supplier of the safety data sheet

Distributor

WEICON GmbH & Co. KG

Königsberger Str. 255, DE-48157 Münster

Postbox 48045, DE-8460 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

GIZ Bonn (German, English) Tel: ++49(0)228-19 240

TRANSPORT: Consultank Lutz Harder GmbH Tel: +49(0)178

433 7434 (24h Emergency Contact)

Manufacturer

WEICON GmbH & Co. KG

Königsberger Str. 255, DE-48157 Münster

1.4. Emergency telephone number

Emergency advice

-

Phone -

GIZ Bonn (Medizinische Auskunft in Deutsch und Englisch)

Tel: ++49(0)228-19 240

TRANSPORT: Consultank Lutz Harder GmbH Tel: +49(0)178

433 7434 (24h Emergency Contact)

! 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

H332

Skin Corr. 1B

H314

Eye Dam. 1

H318

! Classification according to Regulation (EC) No 1272/2008 [CLP/GHS]

| Hazard classes and Hazard categories | Hazard Statements | Classification procedure |
|--------------------------------------|-------------------|--------------------------|
| Skin Sens. 1 | H317 | |
| Aquatic Chronic 3 | H412 | |

Hazard Statements

| | |
|-------------|--|
| H302 + H332 | Harmful if swallowed or if inhaled. |
| 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. |

2.2. Label elements

Labelling according to Regulation (EC) No 1272/2008 [CLP/GHS]



GHS05



GHS07

! Signal word

Danger

Hazard Statements

| | |
|-------------|--|
| H302 + H332 | Harmful if swallowed or if inhaled. |
| H314 | Causes severe skin burns and eye damage. |
| H317 | May cause an allergic skin reaction. |
| H412 | Harmful to aquatic life with long lasting effects. |

Precautionary Statements

| | |
|--------------------|--|
| P102 | Keep out of reach of children. |
| P260 | Do not breathe dust/fume/gas/mist/vapours/spray. |
| P264 | Wash hands thoroughly after handling. |
| P270 | Do not eat, drink or smoke when using this product. |
| P271 | Use only outdoors or in a well-ventilated area. |
| 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 or doctor/physician if you feel unwell. |
| P301 + P330 + P331 | IF SWALLOWED: rinse mouth. Do NOT induce vomiting. |
| P302 + P352 | IF ON SKIN: Wash with plenty of soap and water. |
| P303 + P361 + P353 | IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. |
| P304 + P340 | IF INHALED: Remove person to fresh air and keep comfortable for breathing. |
| 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. |
| P312 | Call a POISON CENTER or doctor/physician if you feel unwell. |
| P330 | Rinse mouth. |
| P333 + P313 | If skin irritation or rash occurs: Get medical advice/attention. |
| P363 | Wash contaminated clothing before reuse. |
| P405 | Store locked up. |



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P501

Dispose of contents/container to hazardous or special waste collection point.

! Hazardous ingredients for labeling

4,4'-isopropylidenediphenol, benzyl-alcohol

2.3. Other hazards

! Information pertaining to special dangers for human and environment

Harmful by inhalation and if swallowed.

! 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

Aliphatic and cyclo-aliphatic polyamine.

! Hazardous ingredients

| CAS No | EC No | Name | [% weight] | Classification according to Regulation (EC) No 1272/2008 [CLP/GHS] |
|------------|-----------|--|------------|--|
| 100-51-6 | 202-859-9 | benzyl-alcohol | 30 - 60 | Acute Tox. 4, H302; H332 / Eye Irrit. 2, H319 |
| 2855-13-2 | 220-666-8 | 3-Aminomethyl-3,5, 5-trimethylcyclohexylamin | 30 - 60 | Acute Tox. 4, H302, H312 / Skin Corr. 1B, H314 / Eye Dam. 1, H318 / Skin Sens. 1, H317 / Aquatic Chronic 3, H412 |
| 80-05-7 | 201-245-8 | 4,4'-isopropylidenediphenol | 1 < 3 | Eye Dam. 1, H318 / Skin Sens. 1, H317 / Repr. 2, H361f / STOT SE 3, H335 / Aquatic Chronic 2, H411 |
| 25620-58-0 | 247-134-8 | trimethylhexane-1,6-diamine | 7 - 13 | Acute Tox. 4, H302 / Skin Corr. 1C, H314 / Eye Dam. 1, H318 / Skin Sens. 1, H317 / Aquatic Chronic 3, H412 |

REACH

| CAS No | Name | REACH registration number |
|---------|-----------------------------|---------------------------|
| 80-05-7 | 4,4'-isopropylidenediphenol | 01-2119457856-23 |

! SECTION 4: First aid measures

4.1. Description of first aid measures

! General information

Remove contaminated soaked clothing immediately.

In case of allergic reactions, specially at respiratory tract, seek medical treatment immediately.

Adhere to personal protective measures when giving first aid.

! In case of inhalation

Remove the casualty into fresh air and keep him immobile.

Ensure of fresh air.

No mouth-to-mouth resuscitation by first aid.

Seek medical treatment immediately.

Artificial respiration with respiration bag or respirator.

! In case of skin contact

In case of contact with skin wash off immediately with soap and water.

Immediate medical treatment necessary, as untreated burns can result in slow-healing wounds.



In case of eye contact

In case of contact with eyes rinse thoroughly with water.

Call for a doctor immediately.

! In case of ingestion

Do not induce vomiting.

Call for a doctor immediately.

Rinse out mouth and give plenty of water to drink.

4.2. Most important symptoms and effects, both acute and delayed

! Physician's information / possible symptoms

Unconsciousness

Coughing

vomiting

Respiratory complaints

Headache

Asthmatic complaints

Allergic symptoms

Skin burns

Confusion

Gastrointestinal complaints

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)

If swallowed or in the event of vomiting, risk of entering the lungs.

Keep under medical supervision for at least 48 hours.

! SECTION 5: Firefighting measures

5.1. Extinguishing media

! Suitable extinguishing media

Fire-extinguishing activities according to surrounding.

5.2. Special hazards arising from the substance or mixture

In case of fire formation of dangerous gases possible.

Nitrogen oxides (NO_x)

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

Ensure adequate ventilation.
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).
After taking up the material dispose according to regulation.

! Additional Information

Sort out leaky cans and dispose according to regulations.

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.
It is essential for pregnant women to avoid inhaling the product and not to let it come in contact with the skin.

! Hygiene measures

At work do not eat, drink and smoke.
Remove soaked clothing immediately.
Work in rooms with good ventilation.
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.
Ventilate store-rooms thoroughly.

! 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

Keep container tightly closed and store at cool and aired place.
Protect from heat and direct solar radiation.



Storage temperature between 2°C to 40°C
Store in a dry place.
Recommended storage temperature: room temperature.

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

! Additional advice

The statutory local and national regulations have to be observed.

8.2. Exposure controls

! Respiratory protection

If ventilation insufficient, wear respiratory protection.

Selection of the appropriate filter type depends on the quantity and chemicals handled at the workplace. Contact supplier of respiratory protective equipment or more information about filter properties.

Breathing apparatus in the event of aerosol or mist formation.

Hand protection

In the cases of special applications, it is recommended to check the chemical resistance with the manufacturer of the gloves.

Chemical protective gloves must be chosen carefully in view of their design and depending on the dependence on the concentration and amounts of dangerous goods used in the specific working tasks.

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

Sufficient ventilation and exhaustion.

! SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance

liquid

Colour

light yellow

Odour

hardly noticeable

Odour threshold

not determined

Important health, safety and environmental information

| | Value | Temperature | at | Method | Remark |
|----------------------|----------------|-------------|----|-----------|------------------------------|
| pH value | ca. 11 | 20 | | | 1:1 in water |
| boiling point | > 200 °C | | | | |
| melting point | not determined | | | | |
| Flash point | 108 °C | | | DIN 51758 | Pensky-Martens Closed Cup |



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| | Value | Temperature | at | Method | Remark |
|--|---------------------------|-------------|----|--------|-------------------|
| Vapourisation rate | not determined | | | | |
| Flammable (solid) | not determined | | | | |
| Flammability (gas) | not determined | | | | |
| Ignition temperature | not determined | | | | |
| Self ignition temperature | not determined | | | | |
| Lower explosion limit | not determined | | | | |
| Upper explosion limit | not determined | | | | |
| Vapour pressure | ca. 6 Pa | 20 °C | | | |
| Relative density | 1 g/cm ³ | 25 °C | | | |
| Vapour density | not determined | | | | |
| Solubility in water | | 20 °C | | | partially soluble |
| Solubility/other | not determined | | | | |
| Partition coefficient n-octanol/water (log P O/W) | not determined | | | | |
| Decomposition temperature | > 200 °C | | | | |
| Viscosity dynamic | 30-70 mPa*s | 25 °C | | | |
| Viscosity kinematic | not determined | 40 °C | | | |
| 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 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 (NO_x)

Toxic gases/vapours

Thermal decomposition

Remark No decomposition if used as directed.

! SECTION 11: Toxicological information**11.1. Information on toxicological effects****Acute toxicity/Irritation/Sensitization**

| | Value/Validation | Species | Method | Remark |
|------------------------------|-------------------------------|------------|----------|-----------------------------------|
| LD50 acute oral | 1030 mg/kg | rat | | CAS: 2855-13-2 |
| LD50 acute dermal | 6400 mg/kg | rabbit | | CAS: 80-05-7 |
| LC50 acute inhalation | > 170 mg/m ³ (6 h) | rat | | CAS: 80-05-7 |
| Skin irritation | corrosive | rabbit | OECD 404 | Toxicology tests with the product |
| Eye irritation | corrosive | rabbit eye | OECD 405 | Toxicology test with the product. |
| Skin sensitization | sensitizing | Guinea pig | OECD 406 | Toxicology test with the product. |

Subacute Toxicity - Carcinogenicity

| | Value | Species | Method | Validation |
|------------------------------|--|----------------|--------|---|
| Chronic Toxicity | NOAEL 60 mg/kg (90 d) Repeated Dose 90-Day Oral Toxicity Study in Rodents OECD 408 | CAS: 2855-13-2 | | - |
| Mutagenicity | | | | No mutagenicity, after different in-vitro studies. |
| Reproduction-Toxicity | | | | No indications of toxic effects were observed in reproduction studies in animals. |
| Carcinogenicity | | | | No indications of carcinogenic effects are available from long-term trials. |

**! Experiences made from practice**

Vapours may cause dizziness, headaches and tiredness

Risk of strong health injuries in case of long-term exposition.

Sensitization through skin contact possible.

Inhalation can cause damage to the respiratory tract or lungs.

Skin: causes strong corrosions.

Causes corrosions.

Risk of strong eye injuries.

Irritates respiratory tract.

Inhalation causes headache/nausea.

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 110 mg/l (96 h) | Fish | EU EC C. 1 Acute Toxicity for Fish | CAS: 2855-13-2 |
| Daphnia | EC50 23 mg/l (48 h) | Daphnia sp. | OECD 202 | CAS: 2855-13-2 |
| Algae | EC50 37 mg/l (72 h) | Green algae | EU EC C.3 Alga Inhibition Test | CAS: 2855-13-2 |
| Bacteria | EC10 1120 mg/l (18 h) | activated sludge | Toxicology test with the product. | CAS: 2855-13-2 |

12.2. Persistence and degradability

| | Elimination rate | Method of analysis | Method | Validation |
|---------------------------------|-----------------------------------|--------------------|---------------|------------------------|
| Biological degradability | 8 % (28 d) CAS: 2855-13-2 | DOC decrease | EU Method C.4 | not readily degradable |
| Degradability | 95 - 97 % (21 d) CAS: 100-51-6 | DOC decrease | OECD 301 A | readily degradable |

12.3. Bioaccumulative potential

The product has not been tested. Because of the product's consistency and low solubility in water bioavailability is not likely.

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.



! SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste code No.

07 02 04*

Name of waste

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.

Packaging that cannot be cleaned should be disposed of like the product.

! 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 | 2289 | 2289 | 2289 |
| 14.2. UN proper shipping name | ISOPHORONEDIAMINE | ISOPHORONEDIAMINE | Isophoronediamine |
| 14.3. Transport hazard class(es) | 8 | 8 | 8 |
| 14.4. Packing group | III | III | III |
| 14.5. Environmental hazards | No | No | No |

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

Land and inland navigation transport ADR/RID

Hazard label(s) 8

tunnel restriction code E

Classification code C7

! 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: 8.0

H302 Harmful if swallowed.

H302, -?-

~~H302~~; -?-

~~H332~~ Causes severe skin burns and eye damage.

H317 May cause an allergic skin reaction.

H318 Causes serious eye damage.

H319 Causes serious eye irritation.

H335 May cause respiratory irritation.

H361f Suspected of damaging fertility or the unborn child (state specific effect if known) (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard).

H411 Toxic to aquatic life with long lasting effects.

H412 Harmful to aquatic life with long lasting effects.