

**! SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1. Product identifier**

Name of product RK-7300 Hardener
Code-Nr. 105692

1.2. Relevant identified uses of the substance or mixture and uses advised against**Recommended intended purpose(s)**

Hardener

1.3. Details of the supplier of the safety data sheet**Distributor**

WEICON GmbH & Co. KG
Königsberger Str. 255, DE-48157 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
Fax +49(0)251 / 9322 - 244
E-mail (competent person):
msds@weicon.de

1.4. Emergency telephone number

EMERGENCY CONTACT - UK, UAE, South Africa (24h): Tel:
++44 1865 407333 (English)
TRANSPORT EMERGENCY CONTACT - UK, UAE, South
Africa (24h): Tel: ++44 1865 407333 (English)

Manufacturer

WEICON GmbH & Co. KG
Königsberger Str. 255, DE-48157 Münster

1.4. Emergency telephone number

GIFTNOTRUF/TRANSPORTNOTRUF - Deutschland (24h):
Tel: ++49 69 222 25285 (Deutsch, Englisch)

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 |
|--------------------------------------|-------------------|--------------------------|
|--------------------------------------|-------------------|--------------------------|

| | | |
|---------------|------|--|
| Skin Irrit. 2 | H315 | |
| Eye Irrit. 2 | H319 | |
| Skin Sens. 1 | H317 | |
| STOT SE 3 | H335 | |

Hazard Statements

| | |
|------|--------------------------------------|
| H315 | Causes skin irritation. |
| H317 | May cause an allergic skin reaction. |
| H319 | Causes serious eye irritation. |
| H335 | May cause respiratory irritation. |

2.2. Label elements

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



GHS07

Signal word

Warning

Hazard Statements

H315 Causes skin irritation.
 H317 May cause an allergic skin reaction.
 H319 Causes serious eye irritation.
 H335 May cause respiratory irritation.

Precautionary Statements

P102 Keep out of reach of children.
 P261 Avoid breathing vapours/spray.
 P271 Use only outdoors or in a well-ventilated area.
 P272 Contaminated work clothing should not be allowed out of the workplace.
 P280 Wear protective gloves/eye protection.
 P302 + P352 IF ON SKIN: Wash with plenty of soap and water.
 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.
 P333 + P313 If skin irritation or rash occurs: Get medical advice/attention.
 P337 + P313 If eye irritation persists: Get medical advice/attention.
 P403 + P233 Store in a well-ventilated place. Keep container tightly closed.
 P405 Store locked up.
 P501 Dispose of contents/container to hazardous or special waste collection point.

Hazardous ingredients for labeling

2-Ethylhexyl Methacrylat, Benzyl Methacrylate

2.3. Other hazards

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

Compound

Hazardous ingredients

| CAS No | EC No | Name | [% weight] | Classification according to Regulation (EC) No 1272/2008 [CLP/GHS] |
|---------|-----------|---------------------|------------|---|
| 80-62-6 | 201-297-1 | methyl methacrylate | < 1 | Flam. Liq. 2, H225 / STOT SE 3, H335 / Skin Irrit. 2, H315 / Skin Sens. 1, H317 |

**Hazardous ingredients (continued)**

| CAS No | EC No | Name | [% weight] | Classification according to Regulation (EC) No 1272/2008 [CLP/GHS] |
|-------------|-----------|---|------------|--|
| 2495-37-6 | 219-674-4 | Benzyl Methacrylate | 30 - 60 | Skin Irrit. 2, H315 / Eye Irrit. 2, H319 / Skin Sens. 1, H317 / STOT SE 3, H335 |
| 688-84-6 | 211-708-6 | 2-Ethylhexyl Methacrylat | 5 - 10 | Skin Irrit. 2, H315 / Eye Irrit. 2, H319 / STOT SE 3, H335 / Aquatic Chronic 3, H412 |
| 148861-07-8 | | TRIETHYLBORANE-1,3-DIAMINOPROPANE COMPLEX | 1 < 2,5 | Acute Tox. 4, H312 / Skin Corr. 1A, H314 / Eye Dam. 1, H318 |

REACH

| CAS No | Name | REACH registration number |
|-------------|---|-----------------------------|
| 80-62-6 | methyl methacrylate | 01-2119452498-28 |
| 2495-37-6 | Benzyl Methacrylate | 01-2119960155-39 |
| 688-84-6 | 2-Ethylhexyl Methacrylat | 01-2119490166-35 |
| 148861-07-8 | TRIETHYLBORANE-1,3-DIAMINOPROPANE COMPLEX | not subject to registration |

SECTION 4: First aid measures**4.1. Description of first aid measures****General information**

In the event of persistent symptoms receive medical treatment.

In case of inhalation

Remove the casualty into fresh air and keep him immobile.

In the event of symptoms refer for medical treatment.

In case of skin contact

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

Consult a doctor if skin irritation persists.

In case of eye contact

In case of contact with eyes rinse thoroughly with plenty of water and seek medical advice.

In case of ingestion

Do not induce vomiting.

Call for a doctor immediately.

4.2. Most important symptoms and effects, both acute and delayed**Physician's information / possible symptoms**

Allergic symptoms

4.3. Indication of any immediate medical attention and special treatment needed

No information available.

SECTION 5: Firefighting measures**5.1. Extinguishing media****Suitable extinguishing media**

Alcohol-resistant foam

ABC powder

Carbon dioxide

sand

Water spray jet

Unsuitable extinguishing media

Full water jet

5.2. Special hazards arising from the substance or mixture

In case of fire formation of dangerous gases possible.

Nitrogen gases (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.

! SECTION 6: Accidental release measures**6.1. Personal precautions, protective equipment and emergency procedures****For non-emergency personnel**

Ensure adequate ventilation.

Remove persons to safety.

Use personal protective clothing.

Use breathing apparatus if exposed to vapours/dust/aerosol.

6.2. Environmental precautions

Do not discharge into the drains or bodies of water..

Do not discharge into the drains/surface waters/groundwater.

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).

Ventilate area concerned

After taking up the material dispose according to regulation.

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**

Keep container tightly closed.

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

Do not inhale vapours.

Avoid contact with eyes and skin

Ensure sufficient ventilation.

Hygiene measures

At work do not eat, drink and smoke.

Remove soiled or 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 only in original container.

Advice on storage compatibility

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

Store at +5 till +25 °C.

Keep container tightly closed and store at cool and aired place.

Protect from heat and direct solar radiation.

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****! Ingredients with occupational exposure limits to be monitored**

| CAS No | Name | Code | [mg/m3] | [ppm] | Remark |
|---------|---------------------|------------|---------|-------|-----------|
| 80-62-6 | Methyl methacrylate | 8 hours | 208 | 50 | EH40/2005 |
| | | Short-term | 416 | 100 | |

Indicative occupational exposure limit values (91/322/EEC, 2000/39/EC, 2006/15/EC or 2009/161/EU)

| CAS No | Name | Code | [mg/m3] | [ppm] | Remark |
|---------|---------------------|------------|---------|-------|--------|
| 80-62-6 | methyl-methacrylate | 8 hours | | 50 | |
| | | Short-term | | 100 | |

Additional advice

The statutory local and national regulations have to be observed.

8.2. Exposure controls**Respiratory protection**

In case of insufficient ventilation or long-term effect use breathing apparatus.

Short term: filter apparatus, Filter A/P2

Hand protection

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

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

Glove material specification [make/type, thickness, permeation time/life, wetting resistance]: Nitrile rubber; 0,4mm; 480min;60min.

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

colourless

Odour

acid

Odour threshold

not determined

Important health, safety and environmental information

| | Value | Temperature | at | Method | Remark |
|--|-------------------------|-------------|---------|--------|-----------------------|
| pH value | not applicable | | | | |
| boiling point | not determined | | | | |
| melting point | not determined | | | | |
| Flash point | > 100 °C | | | | |
| Vapourisation rate | not determined | | | | |
| Flammable (solid) | not applicable | | | | |
| Flammability (gas) | not applicable | | | | |
| Ignition temperature | not determined | | | | |
| Self ignition temperature | not determined | | | | |
| Lower explosion limit | not determined | | | | |
| Upper explosion limit | not determined | | | | |
| Vapour pressure | not determined | | | | |
| Relative density | ca. 1 g/cm ³ | | | | |
| Vapour density | not determined | | | | |
| Solubility in water | | | | | difficult to dissolve |
| Solubility/other | | | acetone | | soluble |
| Partition coefficient n-octanol/water (log P O/W) | not determined | | | | |
| Decomposition temperature | not determined | | | | |
| Viscosity kinematic | ca. 25000 mPa*s | 25 °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 oxidising agents.

10.4. Conditions to avoid

Keep away from heat.

10.5. Incompatible materials**Substances to avoid**

Oxidising agent, strong

10.6. Hazardous decomposition products

Gases/vapours, toxic

Nitrous gases

Carbon monoxide and carbon dioxide.

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 | 3980 mg/kg | rat | | CAS: 2495-37-6 |
| LD50 acute dermal | > 5000 mg/kg | | | ATE |
| Skin irritation | irritant | | | |
| Eye irritation | strong irritant | | | |
| Skin sensitization | sensitizing | | | |

Subacute Toxicity - Carcinogenicity

| | Value | Species | Method | Validation |
|------------------------------|-------|---------|--------|---|
| Mutagenicity | | | | No experimental information on genotoxicity in vitro available. |
| Reproduction-Toxicity | | | | No indications of toxic effects were observed in reproduction studies in animals. |



| Value | Species | Method | Validation |
|------------------------|---------|--------|---|
| Carcinogenicity | | | No indications of carcinogenic effects are available from long-term trials. |

Experiences made from practice

May irritate the mucosae.

Sensitization through skin contact possible.

Frequent contact specially if dried out may cause skin and eye irritations.

Long-term irritations of eyes possible.

Irritates eyes and skin.

! Additional information

The product is to be handled with the caution usual with chemicals.

Other hazardous properties may not be excluded.

The product has not been tested. The information is derived from the properties of the individual components.

SECTION 12: Ecological information**12.1. Toxicity****Ecotoxicological effects**

| Value | Species | Method | Validation |
|-----------------|-----------------------|---------------------------|----------------|
| Fish | LC50 4,67 mg/l (48 h) | Pimephales promelas | CAS: 2495-37-6 |
| Daphnia | NOEC 4,21 mg/l (21 d) | Daphnia magna | CAS: 2495-37-6 |
| Algae | NOEC 0,28 mg/l (72 h) | Selenastrum capricornutum | CAS: 688-84-6 |
| Bacteria | NOEC 100 mg/l (28 d) | activated sludge | CAS: 688-84-6 |

12.2. Persistence and degradability

| Elimination rate | Method of analysis | Method | Validation |
|---------------------------------|-------------------------------|--------|------------|
| Biological degradability | 74 % (25 d) CAS: 2495-37-6 | | 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**

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.

The ecotoxic effect of the product has not been tested. The information on this is given on the basis of details in the literature.



SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste code No.

08 04 09*

Name of waste

waste adhesives and sealants containing organic solvents or other hazardous substances

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.

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 | - | - | - |
| 14.2. UN proper shipping name | - | - | - |
| 14.3. Transport hazard class(es) | - | - | - |
| 14.4. Packing group | - | - | - |
| 14.5. Environmental hazards | - | - | - |
| 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 | | |
| Transport/further information | No dangerous goods as defined by the transport regulations - ADR/RID, IMDG, ICAO/IATA-DGR. | | |

! 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: 1.2

| | |
|------|--|
| H225 | Highly flammable liquid and vapour. |
| H312 | Harmful in contact with skin. |
| H314 | Causes severe skin burns and eye damage. |
| H315 | Causes skin irritation. |
| H317 | May cause an allergic skin reaction. |
| H318 | Causes serious eye damage. |
| H319 | Causes serious eye irritation. |
| H335 | May cause respiratory irritation. |
| H412 | Harmful to aquatic life with long lasting effects. |