

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

Urethane Resin 45-60-80

Code-Nr. 105101

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

2-Component Epoxy Resin - Resin 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**

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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
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Acute Tox. 4		
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Eye Irrit. 2	H319	
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Resp. Sens. 1	H334	
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Skin Sens. 1	H317	
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Hazard Statements

H317

May cause an allergic skin reaction.

H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.

2.2. Label elements

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



GHS07



GHS08

Signal word

Danger

Hazard Statements

H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Precautionary Statements

P102	Keep out of reach of children.
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P264	Wash hands thoroughly after handling.
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/protective clothing/eye protection/face protection.
P285	In case of inadequate ventilation wear respiratory 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.
P304 + P341	IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position 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.
P312	Call a POISON CENTER or doctor/physician if you feel unwell.
P333 + P313	If skin irritation or rash occurs: Get medical advice/attention.
P337 + P313	If eye irritation persists: Get medical advice/attention.
P342 + P311	If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.
P363	Wash contaminated clothing before reuse.
P501	Dispose of contents/container to hazardous or special waste collection point.

Hazardous ingredients for labeling

4-methyl-m-phenylene diisocyanate, aromatic polyisocyanate-prepolymer, Hexamethylendiisocyanat, Oligomerisationsprodukt (Uretidion Typ)

Special rules for supplemental label elements for certain mixtures

Contains Isocyanate. Observe manufacturer's instructions.

2.3. Other hazards

Information pertaining to special dangers for human and environment

Recognised allergen.

May cause sensitization by inhalation.

Harmful: danger of serious damage to health by prolonged inhalation



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

! Hazardous ingredients

CAS No	EC No	Name	[% weight]	Classification according to Regulation (EC) No 1272/2008 [CLP/GHS]
584-84-9	209-544-5	4-methyl-m-phenylene diisocyanate	0,3 - 0,99	Carc. 2, H351 / Acute Tox. 2, H330 / Eye Irrit. 2, H319 / STOT SE 3, H335 / Skin Irrit. 2, H315 / Resp. Sens. 1, H334 / Skin Sens. 1, H317 / Aquatic Chronic 3, H412
28182-81-2		Hexamethylenediisocyanat, Oligomerisationsprodukt (Uretidion Typ)	1 <= 2,5	Acute Tox. 3, H331 / Skin Sens. 1, H317 / STOT SE 3, H335
37273-56-6		aromatic polyisocyanate-prepolymer	50 - 99,99	Eye Irrit. 2, H319 / Skin Sens. 1, H317
28182-81-2		HDI oligomers, isocyanurate	2,5 < 10	Acute Tox. 4, H332 / Skin Sens. 1, H317 / STOT SE 3, H335

REACH

CAS No	Name	REACH registration number
28182-81-2	Hexamethylenediisocyanat, Oligomerisationsprodukt (Uretidion Typ)	01-2119488177-26-0000

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

Remove contaminated soaked clothing immediately.

In case of inhalation

Ensure of fresh air.

Seek medical treatment immediately.

In case of skin contact

In case of contact with skin wash off 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

Seek medical advice.

Do not induce vomiting.

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

Physician's information / possible symptoms

Coughing

Respiratory complaints

Headache

Asthmatic complaints

skin irritation



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

Treatment (Advice to doctor)

Treat symptoms.

Keep under medical supervision for at least 48 hours.

Symptoms may not occur until several hours.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

ABC powder

Carbon dioxide

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 oxides (NO_x)

Carbon monoxide (CO)

Carbon dioxide (CO₂)

Hydrogen cyanide (HCN)

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.

Additional information

Cool endangered containers with water spray jet.

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.

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

6.2. Environmental precautions

Inform pollution control authorities if product gets into the sewerage systems or open waters.

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.

Hygiene measures

At work do not eat, drink and smoke.

Remove soaked clothing immediately.

Wash hands before breaks and after work.

Advice on protection against fire and explosion

No special measures necessary.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep in closed original container.

Advice on storage compatibility

Do not store together with animal feedstuffs.

Do not store together with food.

Further information on storage conditions

Store at cool and aired 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

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

Short-term: filter apparatus, filter A2/P2, otherwise environment-independent breathing apparatus.

! 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

translucent

Odour

characteristic

Odour threshold

not determined

Important health, safety and environmental information

	Value	Temperature	at	Method	Remark
pH value	not determined				
boiling point	> 300 °C			DIN 53171	
melting point	not determined				
Flash point	> 100 °C			closed cup	
Vapourisation rate	not determined				
Flammable (solid)	not determined				
Flammability (gas)	not determined				
Ignition temperature	not determined				
Self ignition temperature					The product is not self-igniting.
Lower explosion limit	not determined				
Upper explosion limit	not determined				
Vapour pressure	not determined				
Relative density	1,1 g/cm ³	20 °C		ISO 2811	
Vapour density	not determined				
Solubility in water					No or low immiscibility
Solubility/other	not determined				
Partition coefficient n-octanol/water (log P O/W)	not determined				
Decomposition temperature	not determined				
Viscosity dynamic	6750 mPa*s	20 °C		ISO 9371	

**Oxidising properties**

No information available.

Explosive properties

The product is considered non-explosive ; nevertheless explosive vapour/air mixtures can be generated .

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

No hazardous reactions known.

10.4. Conditions to avoid

Keep away from heat.

10.5. Incompatible materials**Substances to avoid**

No hazardous reactions known.

10.6. Hazardous decomposition products

Hydrogen cyanide (hydrocyanic acid)

Carbon monoxide and carbon dioxide.

Nitrous oxides (NOx)

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	> 5001 mg/kg	rat		CAS: 37273-56-6
LD50 acute dermal	> 9400 mg/kg	rabbit		CAS: 584-84-9
LC50 acute inhalation	0,107 mg/l (4 h)	rat	OECD 403	CAS: 37273-56-6
Skin irritation	low irritant effect - not necessary to label			
Eye irritation	irritant			
Skin sensitization	sensitizing			



Safety Data Sheet according to Regulation (EC)

No. 1907/2006 (REACH)

Printed 08.01.2016

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Urethane Resin 45-60-80

	Value/Validation	Species	Method	Remark
Sensitization respiratory system	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.
Carcinogenicity				No indications of carcinogenic effects are available from long-term trials.

! Experiences made from practice

Frequent and / or prolonged contact may lead to skin irritation
May irritate the mucosae.
May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Sensitization through inhalation possible.
Sensitization through skin contact possible.
Delayed sensation of pain can occur.
Irritates respiratory tract.
Causes eye irritation.

! 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 133 mg/l (96 h)	rainbow trout	OECD 203	Ecotoxicological tests carried out to determine the properties of a comparable product
Daphnia	EC50 12,5 mg/l (48 h)	Daphnia magna	OECD 202	Ecotoxicological tests carried out to determine the properties of a comparable product
Algae	ErC50 3230 mg/l (96 h)	Skeletonema costatum	OECD 201	Ecotoxicological tests carried out to determine the properties of a comparable product
Bacteria	EC50 > 100 mg/l (3 h)	activated sludge	OECD 209	Ecotoxicological tests carried out to determine the properties of a comparable product

12.2. Persistence and degradability



No information available.

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

Recommendations for the product

Remove in accordance with local official regulations.

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: 8.1

H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H330	Fatal if inhaled.
H331	Toxic if inhaled.
H332	Harmful if inhaled.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335	May cause respiratory irritation.
H351	Suspected of causing cancer (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard).
H412	Harmful to aquatic life with long lasting effects.