

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

Name of product Plastic-Bond Hardener
Code-Nr. 105654

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
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
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Flam. Liq. 2	H225	
Skin Irrit. 2	H315	
Skin Sens. 1	H317	
STOT SE 3	H335	

Hazard Statements

H225	Highly flammable liquid and vapour.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H335	May cause respiratory irritation.

2.2. Label elements

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



GHS02



GHS07

Signal word

Danger

Hazard Statements

H225	Highly flammable liquid and vapour.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H335	May cause respiratory irritation.

Precautionary Statements

P102	Keep out of reach of children.
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233	Keep container tightly closed.
P243	Take precautionary measures against static discharge.
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.
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.
P312	Call a POISON CENTER or doctor/physician if you feel unwell.
P332 + P313	If skin irritation occurs: Get medical advice/attention.
P333 + P313	If skin irritation or rash occurs: Get medical advice/attention.
P362	Take off contaminated clothing.
P363	Wash contaminated clothing before reuse.
P370 + P378	In case of fire: Use foam for extinction.
P403 + P233	Store in a well-ventilated place. Keep container tightly closed.
P403 + P235	Store in a well-ventilated place. Keep cool.
P405	Store locked up.
P501	Dispose of contents/container to hazardous or special waste collection point.

Hazardous ingredients for labeling

methyl 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**

Preparation of different active substances

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	50 < 75	Flam. Liq. 2, H225 / STOT SE 3, H335 / Skin Irrit. 2, H315 / Skin Sens. 1, H317
34590-94-8	252-104-2	(2-methoxymethylethoxy)-propanol	< 0,1	
27138-31-4	248-258-5	Oxydipropyldibenzoat	< 10	Aquatic Chronic 3, H412
34562-31-7	252-091-3	3,5-diethyl-1,2-dihydro-1-phenyl-2-propylpyridine	1 < 3	Acute Tox. 4, H302, H312 / Skin Irrit. 2, H315 / Eye Irrit. 2, H319 / Aquatic Chronic 4, H413
107-98-2	203-539-1	1-methoxy-2-propanol	< 0,1	Flam. Liq. 3, H226 / STOT SE 3, H336

REACH

CAS No	Name	REACH registration number
80-62-6	methyl methacrylate	01-2119452498-28
27138-31-4	Oxydipropyldibenzoat	01-2119529241-49
34562-31-7	3,5-diethyl-1,2-dihydro-1-phenyl-2-propylpyridine	01-2120769712-47
107-98-2	1-methoxy-2-propanol	01-2119457435-35

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.

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.

Rinse out mouth thoroughly with water.

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

vomiting

Respiratory complaints

Allergic symptoms

Confusion

skin irritation

Physician's information / possible dangers

allergic reactions



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

Foam

Dry powder

Carbon dioxide

Dry sand

water mist

Unsuitable extinguishing media

Full water jet

5.2. Special hazards arising from the substance or mixture

Metal oxides

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

Cool endangered containers with water spray jet.

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

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

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

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**

Keep container tightly closed.

Ventilate closed rooms at ground level.

Care for thoroughly room ventilation, if necessary use in well ventilated area with local exhaust ventilation at workplace.

General protective measures

Avoid contact with eyes and skin

Do not inhale gases/vapours/aerosols.

Hygiene measures

At work do not eat, drink, smoke or take drugs.

Remove soiled or soaked clothing immediately.

Wash hands and skin before breaks and after work.

Advice on protection against fire and explosion

Keep away from sources of ignition - No smoking

Protect from heat and sunlight.

Take precautionary measures against static discharges.

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 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.

Store in a dry place.

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/m ³]	[ppm]	Remark
34590-94-8	(2-Methoxymethylethoxy) propanol	8 hours	308	50	EH40/2005
107-98-2	1 -Methoxypropan-2-ol	8 hours	375	100	EH40/2005
		Short-term	560	150	
80-62-6	Methyl methacrylate	8 hours	208	50	EH40/2005
		Short-term	416	100	



Safety Data Sheet according to Regulation (EC)

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Plastic-Bond Hardener**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
107-98-2	1-methoxy-2-propanol	8 hours	375	100	skin
		Short-term	568	150	
34590-94-8	(2-methoxymethylethoxy)-propanol	8 hours	308	50	skin
80-62-6	methyl-methacrylate	8 hours		50	
		Short-term		100	

DNEL-/PNEC-values**DNEL worker**

CAS No	Substance name	Value	Code	Remark
27138-31-4	Oxydipropyldibenzoat	170 mg/kg bw/day	DNEL acute dermal, short-term (systemic)	
		10 mg/kg bw/day	DNEL long-term dermal (systemic)	
		8,8 mg/m3	DNEL long-term inhalative (systemic)	

PNEC

CAS No	Substance name	Value	Code	Remark
27138-31-4	Oxydipropyldibenzoat	1 mg/kg	PNEC soil, freshwater	
		0,00037 mg/l	PNEC aquatic, marine water	
		0,0037 mg/l	PNEC aquatic, freshwater	
		10 mg/kg	PNEC sewage treatment plant (STP)	
		0,149 mg/kg	PNEC sediment, marine water	
		1,49 mg/kg	PNEC sediment, freshwater	

! Additional advice

The statutory local and national regulations have to be observed.

8.2. Exposure controls**Respiratory protection**

If ventilation insufficient, wear respiratory protection.

Short-term: filter apparatus, filter AX/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**

pasty

Colour

whitish

Odour

pungent

Odour threshold

not determined

Important health, safety and environmental information

	Value	Temperature	at	Method	Remark
pH value	not determined				
boiling point	not determined				
melting point	not determined				
Flash point	10 °C			closed cup	
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	0,97 - 1,01 g/ cm ³	20 °C			
Vapour density	not determined				
Solubility in water					insoluble
Solubility/other	not determined				
Partition coefficient n- octanol/water (log P O/W)	not determined				
Decomposition temperature	not determined				
Viscosity dynamic	not determined				
Viscosity kinematic	> 0,4	40 °C			
Solvent content	50,7 %				

**Plastic-Bond Hardener****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

The product is chemically stable under recommended conditions of storage, use and temperature.

10.3. Possibility of hazardous reactions

Reactions with oxidising agents.

Reactions with reducing agents.

If heating up polymerisation.

10.4. Conditions to avoid

Keep away from heat.

Evolution of heat.

10.5. Incompatible materials**Substances to avoid**

Oxidising agent, strong

Reducing agent, strong

10.6. Hazardous decomposition products

Carbon monoxide and carbon dioxide.

Nitrous oxides (NOx)

Toxic gases/vapours

Metaloxides

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	97029,3 mg/kg			ATE
LD50 acute dermal	65884,1 mg/kg			ATE
LC50 acute inhalation	> 200 mg/l (4 h)	rat		CAS: 27138-31-4
Skin irritation	irritant			



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	Value/Validation	Species	Method	Remark
Eye irritation	low irritant - no labeling duty			
Skin sensitization	sensitizing			

Subacute Toxicity - Carcinogenicity

	Value	Species	Method	Validation
Chronic Toxicity	NOAEL 1000 mg/kg (90 d) Repeated Dose 90-Day Oral Toxicity Study in Rodents			-
Mutagenicity				No experimental information on genotoxicity in vivo 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

Often and long skin contact may cause degreasing and desiccation of the skin which may cause skin irritation.
Sensitization through skin contact possible.
Irritates mucous membranes.

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 130000 Mikro-g/l (96 h)	Pimephales promelas		CAS: 80-62-6
Daphnia	EC 50 19,3 mg/l (48 h)	Daphnia magna		CAS: 27138-31-4
Algae	EC50 4,9 mg/l (72 h)	Green algae		CAS: 27138-31-4

12.2. Persistence and degradability

	Elimination rate	Method of analysis	Method	Validation
Degradability	87 % (28 d) CAS: 27138-31-4			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

**Plastic-Bond Hardener**

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.

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	1133	1133	1133
14.2. UN proper shipping name	ADHESIVES	ADHESIVES	Adhesives
14.3. Transport hazard class(es)	3	3	3
14.4. Packing group	II	II	II
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) 3

tunnel restriction code D/E

Special provisions 640D

Classification code F1



SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

VOC standard

VOC content	50,7 %
VOC value	ca.510 g/L

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.
H226	Flammable liquid and vapour.
H302,	-?-
H31 2	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H412	Harmful to aquatic life with long lasting effects.
H413	May cause long lasting harmful effects to aquatic life.