

Safety Data Sheet

According to 1907/2006/EC, Article 31

Printing date 30.01.2024

Version number 1

Revision: 30.01.2024

CRYSTAL CLEAR HARDENER

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

- **1.1 Product identifier:**
- **Trade name:** Crystal Clear Hardener
- **Utilization of the substance of the formulation:** Potting, arts and crafts, coating, casting.

- **1.2 Relevant identified uses of the substance or mixture and uses advised against:**
No further relevant information available.
- **Application for the substance / the preparation:** To be mixed with corresponding substance to produce epoxy.

- **Uses advised against:** None.

- **1.3 Details of the supplier of the safety data sheet**
- **Supplier:**
DWR plastics
Broadway
Newport
Shropshire
TF10 7TP
Tel: +44 (0) 7576028547
Email: info@dwrplastics.com


- **1.4 Emergency telephone number:** + 44 (0) 7576028547

SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture:**
- **Classification according to Regulation (EC) No 1272/2008**

H302 Harmful if swallowed.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H332 Harmful if inhaled.

- **2.2 Label elements:**
- **Labelling according to Regulation (EC) No 1272/2008**
The product is classified and labelled according to the CLP regulation.

- **Hazard pictograms:**
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- GHS07
- **Signal word:** Warning.



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SECTION 3: Composition/information on ingredients

- **3.2 Chemical characterization:** Mixture
- **Description:** Mixture of substances listed below with non-hazardous additions.

· Dangerous components:		
Mixture	Modified Amine Adduct	96%
CAS: 100-51-6 EINECS: 202-859-9	Benzyl alcohol Acute Tox. 4,H302; Acute Tox. H332	3%
CAS: 57834-33-0 EINECS: 260-976-0	Ethyl 4-[[[(methylphenylamino)methylene]amino]benzoate Acute Tox. 4 H302	1%

- **Additional information:** For the wording of the listed hazard phrases refer to section 16.

SECTION 4: First Aid Measures

- **4.1 Description of first aid measures**
- **After inhalation:** Supply fresh air; consult doctor in case of complaints. In case of unconsciousness place patient stably in side position for transportation.
- **After skin contact:** Immediately wash with water and soap and rinse thoroughly. If skin irritation continues, consult a doctor.
- **After eye contact:** Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- **After swallowing:** If symptoms persist consult doctor.
- **4.2 Most important symptoms and effects, both acute and delayed:** No further relevant information available.
- **4.3 Indication of any immediate medical attention and special treatment needed:**
No further relevant information available.

SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:** CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Unsuitable extinguishing agents:** Non-Known.
- **5.2 Special hazards arising from the substance or mixture**
No further relevant information available.
- **5.3 Advice for firefighters**
- **Protective equipment:** No special measures required.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures:** Not required.



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- **6.2 Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- **6.3 Methods and material for containment and cleaning up:** Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
- **6.4 Reference to other sections**
See Section 7 for information on safe handling. See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

SECTION 7: Handling and storage

- **7.1 Precautions for safe handling:** Ingredients with limit values that require monitoring at the workplace:
100-51-6 Benzyl alcohol (3%)
- **Exposure controls:** Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at the end of work.
- **Information about fire and explosion protection:** No special measures required.
- **7.2 Conditions for safe storage, including any incompatibilities:**
- **Requirements to be met by storerooms and receptacles:** Prevent any seepage into the ground. Keep container tightly closed and dry and storage in a good ventilated room. Storage temperature: 15 - 25 °C.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** None.
- **7.3 Denomination of origin:** Made in Germany.
- **General remarks:** For processing instructions see data sheet.

SECTION 8: Exposure controls/personal protection

- **8.1 Control parameters:** Contains no substances with occupational exposure limit values.

· Ingredients with limit values that require monitoring at the workplace:	
100-51-6 Benzyl alcohol (3%)	
MAK (Germany)	Not available.
DNELs:	Not available.
PNECs:	Not available.

Additional information: The lists valid during the making were used as basis.

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- **8.2 Exposure controls:**
- **Appropriate engineering controls:** No further data; see item 7.
- **Individual protection measures, such as personal protective equipment.**

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· **General protective and hygienic measures:**

Keep away from foodstuffs, beverages and feed.
 Immediately remove all soiled and contaminated clothing.
 Wash hands before breaks and at the end of work.
 Avoid contact with the eyes and skin.

· **Respiratory protection:**

If the exposure levels remain below the established exposure limits no respiratory protection is required. Where exposures exceed the established exposure limits, respiratory protection to the material and the degree of exposure is recommended accordingly. A respiratory protection unit offers the same eye and face protection.

The cutting, grinding or sanding of parts after curing can result in respirable dust. Wearing appropriate for this dust respirators may be necessary.

In inadequately ventilated places and during spraying respirator necessary. Recommended to be fresh-air mask or filter combination for short-term work A2-P2.



In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

Not necessary if room is well-ventilated.

· **Hand protection:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· **Material of gloves:**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· **Penetration time of glove material:** The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· **Eye/face protection:**

Face protection



Tightly sealed goggles

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SECTION 9: Physical and chemical properties

· 9.1 Information on basic physical and chemical properties:

General Information

<ul style="list-style-type: none"> · Appearance · Form: · Colour: · Odour: · Odour threshold: · Melting point/freezing point: · Boiling point or initial boiling point and boiling range · Flammability · Lower and upper explosion limit · Lower: · Upper: · Flash point: · Ignition temperature: · Decomposition temperature: · pH · Viscosity: · Kinematic viscosity · Dynamic at 20 °C: · Solubility · water: · Partition coefficient n-octanol/water (log value) · Vapour pressure at 25 °C: · Density and/or relative density · Density at 20 °C: · Relative density: · Vapour density: 	<p>Liquid Transparent Slight amine smell Not determined. Not applicable. Not determined. Not applicable. Not determined. Not determined. 93 °C Not determined. Not determined. Not determined. Not determined. 1200 mPas Insoluble. Not determined. Not determined. 1.03 g/cm³ Not determined. Not determined.</p>
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· 9.2 Other information:

<ul style="list-style-type: none"> · Important information on protection of health and environment, and on safety. · Auto-ignition temperature: · Explosive properties: · Solvent content: Organic solvents · VOC (EC) · Change in condition · Evaporation rate: 	<p>Product is not self-igniting. Product does not present an explosion hazard. 0.0 g/l Not determined</p>
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SECTION 10: Stability and reactivity

10.1 Reactivity: Not classified as a reactivity hazard.

10.2 Chemical stability:

Thermal decomposition / conditions to be avoided: Data not available.

10.3 Possibility of hazardous reactions: No dangerous reactions known.

10.4 Conditions to avoid: No further relevant information available.

10.5 Incompatible materials: No further relevant information available.

10.6 Hazardous decomposition products: No dangerous decomposition products known.

SECTION 11: Toxicological information

- **11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008**
- **Acute toxicity:**

LD/LC50 values relevant for classification:

100-51-6 Benzyl alcohol

Oral	LD50	1230 mg/kg (rat)
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- **Skin corrosion/irritation:** Based on available data, the classification criteria is not met.
- **Serious eye damage/irritation:** Based on available data, the classification criteria is not met.
- **Respiratory or skin sensitisation:** May cause an allergic skin reaction.
- **Germ cell mutagenicity:** Based on available data, the classification criteria is not met.
- **Carcinogenicity:** Based on available data, the classification criteria is not met.
- **STOT-single exposure:** Based on available data, the classification criteria is not met.
- **STOT-repeated exposure:** Based on available data, the classification criteria is not met.
- **Aspiration hazard:** Based on available data, the classification criteria is not met.

- **11.2 Information on other hazards:**

Endocrine disrupting properties

None of the ingredients is listed

SECTION 12: Ecological information

- **12.1 Toxicity:** No further relevant information available.
- **12.2 Persistence and degradability:** No further relevant information available.
- **12.3 Bio accumulative potential:** No further relevant information available.
- **12.4 Mobility in soil:** No further relevant information available.

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- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

- **12.6 Endocrine disrupting properties:** The product does not contain substances with endocrine disrupting properties.

- **12.7 Other adverse effects:**
- **General notes:** Water hazard class 1 (German Regulation)(Self-assessment): Slightly hazardous for water. Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**
- **Recommendation:** Dispose of in accordance to local to the regulations pertaining to the disposal of waste.
- **Uncleaned packaging:** Empty containers should be taken to an approved waste handling site for recycling or disposal.

SECTION 14: Transport information

- | | |
|--|--|
| 14.1 UN-Number | |
| · ADR, ADN, IMDG, IATA | Void |
| <hr/> | |
| 14.2 UN proper shipping name | |
| · ADR, ADN, IMDG, IATA | Void |
| <hr/> | |
| 14.3 Transport hazard class(es) | |
| · ADR, ADN, IMDG, IATA | |
| · Class | Void |
| <hr/> | |
| 14.4 Packing group | |
| · ADR, IMDG, IATA | Void |
| <hr/> | |
| 14.5 Environmental hazards: | |
| · Marine pollutant: | No |
| <hr/> | |
| 14.6 Special precautions for user | |
| | Not dangerous cargo.
Avoid temperatures below 0 ° C. Heat above +50° C.
Protect from moisture. |
| <hr/> | |
| 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code | |
| | Not applicable. |
| <hr/> | |
| UN "Model Regulation": | Void |



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SECTION 15: Regulatory information

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

MAK(German Maximum Workplace Concentration)

None of the ingredients is listed.

Directive 2012/18/EU

Named dangerous substances ANNEXI None of the ingredients is listed.

Seveso category: Not applicable

Qualifying quantity (tonnes) for the application of lower-tier requirements: Not applicable

Qualifying quantity(tonnes) for the application of upper-tier requirements: Not applicable

National regulations:

Water hazard class: Water hazard class 1 (Self-assessment): slightly hazardous for water.

SVHC Candidate List of REACH Regulation Annex XIV Authorisation (20/6/2016)

None of the ingredients is listed.

REACH Regulation Annex XVII Restriction (24/6/2016) See Section 16 for information about

None of the ingredients is listed.

REACH Regulation Annex XIV Authorisation List(14/8/2014)

None of the ingredients is listed.

· **15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.**

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Relevant phrases**

H302 Harmful if swallowed.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H332 Harmful if inhaled.

· **Recommended restriction of use**

The information in this safety data sheet corresponds to the best of our knowledge at the time of the revision. The information should give you clues for the safe handling of the product mentioned in this safety data sheet during storage, processing, transport and disposal. The details are not transferable to other products. Insofar as the product mentioned in this safety data sheet is mixed with other materials, mixed or processed, or subjected to processing, the information in this safety data sheet, unless expressly stated otherwise, can not be transferred to the new material produced in this way.

· **Department issuing SDS:** Environment protection department

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• Abbreviations and acronyms:

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

ICAO: International Civil Aviation Organisation

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

VOC: Volatile Organic Compounds (USA, EU)

DNEL: Derived No-Effect Level (UK REACH)

PNEC: Predicted No-Effect Concentration (UK REACH)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Acute Tox. 4: Acute toxicity – Category 4

Skin Irrit. 2: Skin corrosion/irritation – Category 2

Eye Irrit. 2: Serious eye damage/eye irritation – Category 2

Resp. Sens. 1: Respiratory sensitisation – Category 1

Skin Sens. 1: Skin sensitisation – Category 1

Carc. 2: Carcinogenicity – Category 2

STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2