



### 1 Identification of the substance / preparation and of the company

#### Buehler EpoKwick Hardener

#### Article number: 20-812x

<b>Use:</b>	Epoxy activator
<b>Identified use:</b>	none
<b>Method of operation:</b>	See product information.
<b>Company:</b>	Buehler GmbH In der Steele 2 D-40599 Düsseldorf / GERMANY Phone: 0800 707 6273 Fax: 0800 707 6274 Homepage: <a href="http://www.buehler-met.de/en/">www.buehler-met.de/en/</a> E-mail: <a href="mailto:sales@buehler.co.uk">sales@buehler.co.uk</a>
<b>Emergency phone:</b>	0800 707 6273 (Only valid if dialled within the UK) +49 (0) 211 974100
<b>Responsible:</b>	Schroeder@chemiebuero.de

### 2 Hazards identification

<b>Physico-chemical hazards:</b>	See chapter 10.
<b>Human health dangers:</b>	See R-phrases.
<b>Environmental hazards:</b>	The product/the substance has the Water Hazard Class 2.
<b>Other hazards:</b>	none
<b>Hazard symbols:</b>	



Corrosive

<b>R-phrases:</b>	R 21/22: Harmful in contact with skin and if swallowed. R 34: Causes burns. R 37: Irritating to respiratory system. R 42/43: May cause sensitisation by inhalation and skin contact.
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### 3 Composition / Information on ingredients

Range [%]	Substance
50 - < 80	Polyamine Registration: CAS: 28063-82-3, EINECS/ELINCS: Polymer, EU-INDEX: , ECBnr: GHS/CLP: EEC: C, R34-37-42/43
25 - < 40	2,2'-Iminodiethylamine Registration: CAS: 111-40-0, EINECS/ELINCS: 203-865-4, EU-INDEX: 612-058-00-x, ECBnr: GHS/CLP: EEC: C, R21/22-34-43

<b>Comment on component parts:</b>	For the wording of the listed risk phrases refer to section 16.
<b>Substances of Very High Concern - SVHC:</b>	There are contained no substances which are named in the list SVHC (Candidate List of Substances of Very High Concern for authorization).

### 4 First aid measures

<b>General information:</b>	Remove contaminated soaked clothing immediately and dispose of safely.
<b>Inhalation:</b>	Ensure supply of fresh air. In the event of symptoms seek for medical treatment.
<b>Skin contact:</b>	In case of contact with skin wash off immediately with soap and water. Consult a doctor if skin irritation persists.
<b>Eye contact:</b>	In case of contact with eyes rinse thoroughly with plenty of water and seek medical advice.
<b>Ingestion:</b>	Consult a doctor immediately. Do not induce vomiting. Rinse out mouth and give plenty of water to drink.
<b>Advice to doctor:</b>	Treat symptomatically.

**5 Fire-fighting measures**

<b>Suitable extinguishing media:</b>	Dry powder. Carbon dioxide. Foam. Water spray jet.
<b>Extinguishing media that must not be used:</b>	Full water jet.
<b>Special exposure hazards arising from the substance or preparation itself or combustion products:</b>	Unknown risk of formation of toxic pyrolysis products.
<b>Special protective equipment for firefighters:</b>	Use self-contained breathing apparatus.  Wear full protective suit.
<b>Additional information:</b>	Fire residues and contaminated firefighting water must be disposed of in accordance within the local regulations.

**6 Accidental release measures**

<b>Personal precautions:</b>	High risk of slipping due to leakage/spillage of product. Ensure adequate ventilation.
<b>Environmental precautions:</b>	Prevent spread over a wide area (e.g. by containment or oil barriers). Do not discharge into the drains/surface waters/groundwater.
<b>Methods for cleaning up:</b>	Pick up with absorbent material (e.g. sand, sawdust, universal absorbent, diatomaceous earth). Dispose of absorbed material in accordance within the regulations.

**7 Handling and storage**

<b>Advice on safe handling:</b>	Use only in well-ventilated areas. No special measures necessary if used correctly.
<b>Advice on protection against fire and explosion:</b>	No special measures necessary.
<b>Requirements for storage rooms and vessels:</b>	Keep only in original container.
<b>Advice on storage compatibility:</b>	Do not store together with oxidizing agents.
<b>Further information on storage conditions:</b>	Keep container tightly closed. Keep container in a well-ventilated place.

**8 Exposure controls / personal protection**

**Additional advice on system design:** Ensure adequate ventilation on workstation.

**Ingredients with occupational exposure limits to be monitored: (GB)**

Range [%]	Substance / WEL: Workplace exposure limit
25 - < 40	2,2'-Iminodiethylamine / 1ppm, 4,3mg/m <sup>3</sup> , Sk

<b>Respiratory protection:</b>	not applicable
<b>Hand protection:</b>	Nitrile rubber, >480 min (EN 374).
<b>Eye protection:</b>	Safety glasses.
<b>Skin protection:</b>	Light protective clothing of plastic material.
<b>General protective measures:</b>	Avoid contact with eyes and skin. Do not inhale vapours.
<b>Hygiene measures:</b>	After worktime and before work breaks the affected skin areas must be thoroughly cleaned. Remove soiled or soaked clothing immediately. Do not eat, drink, smoke or take drugs at work. Use barrier skin cream.
<b>Delimitation and monitoring of the environmental exposition:</b>	not determined



### 9 Physical and chemical properties

Form:	liquid
Color:	yellow
Odor:	characteristic
pH-value:	alkaline
pH-value [1%]:	not determined
Boiling point [°C]:	207
Flash point [°C]:	100
Flammability [°C]:	not determined
Lower explosion limit:	not applicable
Upper explosion limit:	not applicable
Oxidizing properties:	no
Vapour pressure [kPa]:	not determined
Density [g/ml]:	1,0291
Bulk density [kg/m³]:	not applicable
Solubility in water:	partially miscible
Partition coefficient [n-octanol/water]:	not determined
Viscosity:	not applicable
Relative vapour density determined in air:	not determined
Evaporation speed:	not determined
Melting point [°C]:	not determined
Autoignition temperature [°C]:	not determined
Decomposition temperature:	not determined

### 10 Stability and reactivity

Hazardous reactions:	Reactions with oxidizing agents.
Hazardous decomposition products:	No hazardous decomposition products known.

### 11 Toxicological information

Acute oral toxicity:	not determined
Acute dermal toxicity:	not determined
Acute inhalational toxicity:	not determined
Irritant effect on eye:	not determined
Irritant effect on skin:	not determined
Sensitization:	not determined
Subacute toxicity:	not determined
Chronic toxicity:	not determined
Mutagenicity:	not determined
Reproduction toxicity:	not determined
Carcinogenicity:	not determined
Experiences made in practice:	none
General remarks:	Toxicological data are not available. The product was classified on the basis of the calculation procedure of the preparation directive.

### 12 Ecological information

Fish toxicity:	not determined
Daphnia toxicity:	not determined
Behaviour in environment compartments:	not determined
Behaviour in sewage plant:	not determined
Bacteria toxicity:	not determined
Biological degradability:	not determined
COD:	not determined
BOD 5:	not determined
AOX-advice:	No dangerous components.
2006/11/EC:	not applicable
General information:	Ecological data are not available.

**13 Disposal considerations**

<b>Product:</b>	Dispose of as hazardous waste. Disposal in an incineration plant in accordance with the regulations of the local authorities.
<b>Contaminated packaging:</b>	Packaging that cannot be cleaned should be disposed of as for product. Uncontaminated packaging may be taken for recycling.
<b>Waste no. (recommended):</b>	080409*

**14 Transport information**

<b>Classification according to ADR:</b>	UN 2079 Diethylenetriamine, solution 8, II
<b>- Classification Code:</b>	C7
<b>- Label:</b>	
<b>- ADR LQ</b>	LQ22 1I
<b>- ADR 1.1.3.6 (8.6):</b>	Transport category (tunnel restriction code): 2 (E)
<b>Classification according to IMDG:</b>	UN 2079 Diethylenetriamine, solution 8 II
<b>- EMS</b>	F-A, S-B
<b>- Label:</b>	
<b>- IMDG LQ:</b>	LQ: 1 I
<b>Classification according to IATA:</b>	UN 2079 Diethylenetriamine, solution 8 II
<b>- Label:</b>	

**15 Regulatory information**

<b>Exposure scenario:</b>	not applicable
<b>Chemical safety report:</b>	not applicable
<b>Labelling:</b>	The product is classified and labelled in accordance within EC-directives.
<b>Hazard symbols:</b>	
<b>Contains:</b>	Corrosive Polyamine 2,2'-Iminodiethylamine
<b>R-phrases:</b>	R 21/22: Harmful in contact with skin and if swallowed. R 34: Causes burns. R 37: Irritating to respiratory system. R 42/43: May cause sensitisation by inhalation and skin contact.
<b>S-phrases:</b>	S 23.3: Do not breathe vapour. S 26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. S 36/37/39: Wear suitable protective clothing, gloves and eye/face protection. S 45: In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
<b>Special labelling:</b>	none
<b>Authorisation, TITEL VII:</b>	not applicable
<b>Restrictions, TITEL VIII:</b>	not applicable
<b>EEC-REGULATIONS:</b>	1967/548 (2008/58, 30. ATP/ 31. ATP); 1991/689 (2001/118); 1999/13; 2004/42; 648/2004; 1907/2006 (Reach); 1272/2008; 75/324/EWG (2008/47/EG)
<b>TRANSPORT-REGULATIONS:</b>	DOT-Classification, ADR (2009); IMDG-Code (34. Amdt.); IATA-DGR (2010).
<b>NATIONAL REGULATIONS (GB)</b>	EH40/2005 Workplace exposure limits with amendments October 2007. CHIP 3/ CHIP 4



**16 Other informations**

<b>R-phrases (Chapter 03):</b>	R 21/22: Harmful in contact with skin and if swallowed. R 34: Causes burns. R 37: Irritating to respiratory system. R 42/43: May cause sensitisation by inhalation and skin contact. R 43: May cause sensitisation by skin contact.
<b>Modified position:</b>	Chapter: 14 been added:
<b>Observe employment restrictions for people:</b>	yes
<b>VOC (1999/13/CE):</b>	0%

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