according to Regulation (EC) No 1907/2006

X280-A

Revision date: 26.01.2022

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

1.1. Product identifier

X280-A

UFI:

9D10-80TC-P00W-E9X5

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture

Adhesives, sealants

Uses advised against

No information available.

1.3. Details of the supplier of the safety data sheet

Company name:	Hottinger Brüel & Kjaer
Street:	Im Tiefen See 45
Place:	D-64293 Darmstadt
Telephone:	+49 (0)6151 803-0
Internet:	www.hbm.com
Responsible Department:	support@hbm.com
1.4. Emergency telephone	+49-30-18412-0

number:

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No. 1272/2008

Hazard categories: Acute toxicity: Acute Tox. 4 Respiratory or skin sensitisation: Skin Sens. 1 Germ cell mutagenicity: Muta. 2 Specific target organ toxicity - repeated exposure: STOT RE 2 Hazardous to the aquatic environment: Aquatic Chronic 2 Hazard Statements: Harmful if swallowed. May cause an allergic skin reaction. Suspected of causing genetic defects. May cause damage to organs through prolonged or repeated exposure. Toxic to aquatic life with long lasting effects.

2.2. Label elements

Regulation (EC) No. 1272/2008

Hazard components for labelling

4,4'-Methylenbis[N,N-bis(2,3-epoxypropyl)anilin] N,N-Diglycidyl-4-glycidyloxyanilin

Signal word:

nai wora.





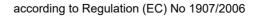
Hazard statements

H302 H317 Harmful if swallowed. May cause an allergic skin reaction.





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H341	Suspected of causing genetic defects.
H373	May cause damage to organs through prolonged or repeated exposure.
H411	Toxic to aquatic life with long lasting effects.
cautionary sta	atements

Prec

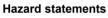
P405	Store locked up.
P362+P364	Take off contaminated clothing and wash it before reuse.
P302+P352	IF ON SKIN: Wash with plenty of water.
P280	Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
P273	Avoid release to the environment.
P272	Contaminated work clothing should not be allowed out of the workplace.
P270	Do not eat, drink or smoke when using this product.
P264	Wash hands thoroughly after handling.

Special labelling of certain mixtures

Restricted to professional users.

Labelling of packages where the contents do not exceed 125 ml

Signal word:	Warning	
Pictograms:		



H317-H341

2.3. Other hazards

No information available.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	GHS Classification			
28768-32-3	4,4'-Methylenbis[N,N-bis(2,3-epoxypropyl)anilin]			45-70 %
	249-204-3			
	Skin Sens. 1, Aquatic Chronic 2; H3	317 H411		
5026-74-4	N,N-Diglycidyl-4-glycidyloxyanilin			35-60 %
	225-716-2			
	Muta. 2, Acute Tox. 4, Skin Sens. 1, STOT RE 2, Aquatic Chronic 3; H341 H302 H317 H373 H412			

Full text of H and EUH statements: see section 16.

Specific Conc. Limits, M-factors and ATE

CAS No	EC No	Chemical name	Quantity
	Specific Conc. I	imits, M-factors and ATE	
5026-74-4	225-716-2	N,N-Diglycidyl-4-glycidyloxyanilin	35-60 %
	oral: ATE = 500) mg/kg	

SECTION 4: First aid measures

4.1. Description of first aid measures



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General information

Remove affected person from the danger area and lay down. If unconscious but breathing normally, place in recovery position and seek medical advice. First aider: Pay attention to self-protection!

After inhalation

Provide fresh air. In case of respiratory tract irritation, consult a physician.

After contact with skin

After contact with skin, wash immediately with plenty of water and soap. Remove contaminated, saturated clothing immediately. In case of skin irritation, consult a physician.

After contact with eyes

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist.

After ingestion

If swallowed, rinse mouth with water (only if the person is conscious). If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.

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

No information available.

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

Water spray jet, Dry extinguishing powder, Foam, Co-ordinate fire-fighting measures to the fire surroundings.

Unsuitable extinguishing media

Full water jet

5.2. Special hazards arising from the substance or mixture

No information available.

5.3. Advice for firefighters

Wear a self-contained breathing apparatus and chemical protective clothing. Co-ordinate fire-fighting measures to the fire surroundings.

Additional information

Use water spray jet to protect personnel and to cool endangered containers. Suppress gases/vapours/mists with water spray jet. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures

Provide adequate ventilation. Do not breathe gas/fumes/vapour/spray. Use personal protection equipment. Do not allow to enter into surface water or drains. Treat the recovered material as prescribed in the section on waste disposal.

6.2. Environmental precautions

Do not allow to enter into surface water or drains.

6.3. Methods and material for containment and cleaning up

Other information

Take up mechanically, placing in appropriate containers for disposal. Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents).



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6.4. Reference to other sections

Safe handling: see section 7 Personal protection equipment: see section 8 Disposal: see section 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Do not breathe gas/fumes/vapour/spray., If handled uncovered, arrangements with local exhaust ventilation have to be used.

Advice on protection against fire and explosion

Co-ordinate fire-fighting measures to the fire surroundings.

Further information on handling

Wear personal protection equipment (refer to section 8). Do not empty into drains. When using do not eat, drink, smoke, sniff.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed and in a well-ventilated place.

Hints on joint storage TRGS 510

Further information on storage conditions

No information available.

7.3. Specific end use(s)

Adhesives, sealants

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Additional advice on limit values

To date, no national critical limit values exist.

8.2. Exposure controls









Appropriate engineering controls

If handled uncovered, arrangements with local exhaust ventilation should be used if possible. If local exhaust ventilation is not possible or not sufficient, the entire working area should be ventilated by technical means.

Protective and hygiene measures

When using do not eat or drink. Do not breathe gas/fumes/vapour/spray. After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of water and soap. Wear suitable protective clothing, gloves and eye/face protection. Draw up and observe skin protection programme.

Eye/face protection

Wear eye/face protection.

Hand protection

When handling with chemical substances, protective gloves must be worn with the CE-label including the four



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control digits. EN ISO 374

The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances.

Thickness of the glove material: >= 0,7mm

Suitable gloves type NBR (Nitrile rubber)

Breakthrough time::>480 min

For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

Skin protection

Used working clothes should not be worn outside the work area. Separate storage of work clothes.

Respiratory protection

If technical exhaust or ventilation measures are not possible or insufficient, respiratory protection must be worn. Filtering device (full mask or mouthpiece) with filter: a

Environmental exposure controls

Do not allow to enter into surface water or drains.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: Colour:	Liquid
Odour:	Adhesives, sealants
pH-Value:	not determined
Changes in the physical state	
Melting point:	not determined
Boiling point or initial boiling point and boiling range:	not determined
Sublimation point:	not determined
Softening point:	not determined
Pour point: not determined:	not determined
Flash point:	228 °C
Sustaining combustion:	No data available
Flammability	
Solid/liquid:	not determined
Gas:	not determined
Explosive properties not determined	
Lower explosion limits:	not determined
Upper explosion limits:	not determined
Auto-ignition temperature:	not determined
Self-ignition temperature	
Solid:	not determined
Gas:	not determined
Decomposition temperature:	not determined
Oxidizing properties not determined	
Vapour pressure: (at 20 °C)	< 0,1 hPa



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not determined	

Vapour pressure: (at 50 °C)	not determined
Density (at 20 °C):	1,17 g/cm³
Bulk density:	not determined
Water solubility:	not determined
Solubility in other solvents not determined	
Partition coefficient n-octanol/water:	not determined
Viscosity / dynamic:	not determined
Viscosity / kinematic:	not determined
Flow time:	not determined
Relative vapour density:	not determined
Evaporation rate:	not determined
Solvent separation test:	not determined
Solvent content:	not determined
9.2. Other information	
Solid content:	not determined
No information available.	

No mornation available.

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SECTION 10: Stability and reactivity

10.1. Reactivity

No information available.

10.2. Chemical stability

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

10.3. Possibility of hazardous reactions

No hazardous reaction when handled and stored according to provisions.

10.4. Conditions to avoid

No information available.

10.5. Incompatible materials

No information available.

10.6. Hazardous decomposition products

No information available.

Further information

No information available.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity

Harmful if swallowed.

ATEmix calculated

ATE (oral) 1000,0 mg/kg



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CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
5026-74-4	N,N-Diglycidyl-4-glycidyloxyanilin				
	oral	ATE 500 mg/kg			

Irritation and corrosivity

Based on available data, the classification criteria are not met.

Sensitising effects

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May cause an allergic skin reaction. (4,4'-Methylenbis[N,N-bis(2,3-epoxypropyl)anilin]; N,N-Diglycidyl-4-glycidyloxyanilin)

Carcinogenic/mutagenic/toxic effects for reproduction

Suspected of causing genetic defects. (N,N-Diglycidyl-4-glycidyloxyanilin) Carcinogenicity: Based on available data, the classification criteria are not met. Reproductive toxicity: Based on available data, the classification criteria are not met.

STOT-single exposure

Based on available data, the classification criteria are not met.

STOT-repeated exposure

May cause damage to organs through prolonged or repeated exposure. (N,N-Diglycidyl-4-glycidyloxyanilin)

Aspiration hazard

Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

12.1. Toxicity

No information available.

12.2. Persistence and degradability

No information available.

12.3. Bioaccumulative potential

No information available.

12.4. Mobility in soil

No information available.

12.5. Results of PBT and vPvB assessment

No information available.

12.7. Other adverse effects

No information available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

Dispose of waste according to applicable legislation.

SECTION 14: Transport information

Land transport (ADR/RID)

<u>1</u> 4	4.1. UN number:	UN 3082
<u>1</u> 4	4.2. UN proper shipping name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
		(Epoxidharz)
<u>1</u> 4	4.3. Transport hazard class(es):	9
<u>1</u> 4	4.4. Packing group:	III

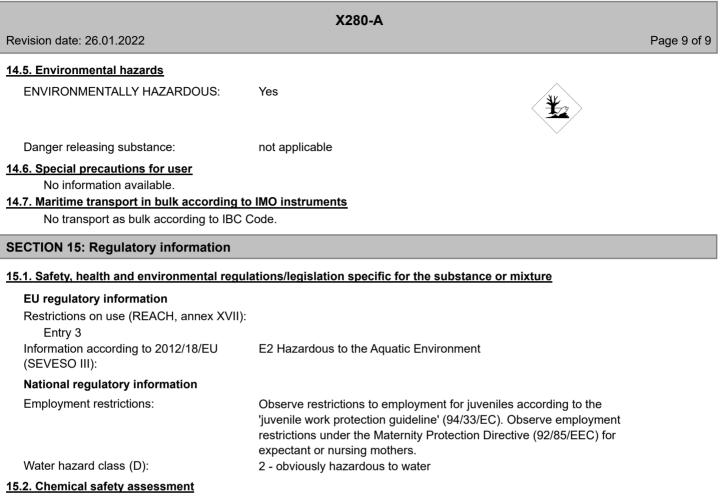


according to Regulation (EC) No 1907/2006



X280-A Revision date: 26.01.2022 Page 8 of 9 Hazard label: 9 Classification code: M6 Limited quantity: 5 L Hazard No: 90 Tunnel restriction code: Inland waterways transport (ADN) UN 3082 14.1. UN number: 14.2. UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Epoxidharz) 14.3. Transport hazard class(es): 9 14.4. Packing group: ш Hazard label: 9 Classification code: M6 Limited quantity: 5 L Marine transport (IMDG) UN 3082 14.1. UN number: 14.2. UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Epoxy resin) 14.3. Transport hazard class(es): 9 14.4. Packing group: Ш Hazard label: 9 Limited quantity: 5 L F-A. S-F EmS: Air transport (ICAO-TI/IATA-DGR) UN 3082 14.1. UN number: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. 14.2. UN proper shipping name: (Epoxy resin) 14.3. Transport hazard class(es): 9 Ш 14.4. Packing group: Hazard label: 9 Limited quantity Passenger: 30 kg G 964 IATA-packing instructions - Passenger: 450 L IATA-max. quantity - Passenger: IATA-packing instructions - Cargo: 964 IATA-max. quantity - Cargo: 450 L

according to Regulation (EC) No 1907/2006



For this substance a chemical safety assessment has not been carried out.

SECTION 16: Other information

Changes

This data sheet contains changes from the previous version in section(s): 2,3,6,9,11,14.

Classification for mixtures and used evaluation method according to Regulation (EC) No. 1272/2008 [CLP]

Classification	Classification procedure
Acute Tox. 4; H302	Calculation method
Skin Sens. 1; H317	Calculation method
Muta. 2; H341	Calculation method
STOT RE 2; H373	Calculation method
Aquatic Chronic 2; H411	Calculation method

Relevant H and EUH statements (number and full text)

H302	Harmful if swallowed.
H317	May cause an allergic skin reaction.
H341	Suspected of causing genetic defects.
H373	May cause damage to organs through prolonged or repeated exposure.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)