

EP310N-B

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1. Identification**Product identifier**

EP310N-B

UFI: XV00-70NY-U00X-F8ES

Recommended use of the chemical and restrictions on use**Use of the substance/mixture**

Adhesives, sealants

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

Emergency phone number: +49-30-18412-0**2. Hazard(s) identification****Classification of the chemical****Regulation (EC) No. 1272/2008**

Flammable liquids: Flam. Liq. 2

Serious eye damage/eye irritation: Eye Irrit. 2

Label elements**Regulation (EC) No. 1272/2008****Signal word:** Danger**Pictograms:****Hazard statements**

Highly flammable liquid and vapor

Causes serious eye irritation

Precautionary statements

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

Avoid release to the environment.

Wear protective gloves/protective clothing/eye protection/face protection.

Special labelling of certain mixtures

Restricted to professional users.

Labelling of packages where the contents do not exceed 125 ml**Signal word:** Danger**Pictograms:****Hazards not otherwise classified**

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Highly flammable.
 Vapors may form explosive mixtures with air.
 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

3. Composition/information on ingredients

Mixtures

Hazardous components

| CAS No | Components | Quantity |
|------------|---|-------------|
| 28064-14-4 | 2-(chloromethyl)oxirane; Formaldehyde; Phenol | 80 - < 85 % |
| 67-64-1 | acetone; propan-2-one; propanone | 15 - < 20 % |

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

Specific Conc. Limits, M-factors and ATE

| CAS No | EC No | Components | Quantity |
|---------|-----------|---|-------------|
| | | Specific Conc. Limits, M-factors and ATE | |
| 67-64-1 | 200-662-2 | acetone; propan-2-one; propanone | 15 - < 20 % |
| | | inhalation: LC50 = 76 mg/l (vapours); dermal: LD50 = 20000 mg/kg; oral: LD50 = 5800 mg/kg | |

Further Information

No information available.

4. First-aid measures

Description of first aid measures

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

When in doubt or if symptoms are observed, get medical advice. 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

Rinse mouth immediately and drink plenty of water. Never give anything by mouth to an unconscious person or a person with cramps. Do NOT induce vomiting.

Most important symptoms and effects, both acute and delayed

No information available.

Indication of any immediate medical attention and special treatment needed

Treat symptomatically. No information available.

5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media

Water spray jet, Dry extinguishing powder, Foam

Unsuitable extinguishing media

Full water jet

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Specific hazards arising from the chemical

Highly flammable.
Vapors may form explosive mixtures with air.
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Special protective equipment and precautions for fire-fighters

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

Additional information

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

6. Accidental release measures**Personal precautions, protective equipment and emergency procedures****General measures**

First aider: Pay attention to self-protection!
Remove all sources of ignition. Provide adequate ventilation.
Vapors are heavier than air, spread along floors and form explosive mixtures with air.
Do not breathe gas/fume/vapor/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.

Environmental precautions

Do not allow uncontrolled discharge of product into the environment. Danger of explosion Do not allow to enter into surface water or drains.

Methods and material for containment and cleaning up**Other information**

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal. Take up mechanically, placing in appropriate containers for disposal. Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents).

Reference to other sections

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

Personal protection equipment (PPE): see section 8

7. Handling and storage**Precautions for safe handling****Advice on safe handling**

If local exhaust ventilation is not possible or not sufficient, the entire working area should be ventilated by technical means.

Keep away from sources of ignition - No smoking.
Keep away from sources of heat (e.g. hot surfaces), sparks and open flames.

Advice on protection against fire and explosion

Keep away from sources of ignition - No smoking. Take precautionary measures against static discharges.
Vapors may form explosive mixtures with air.

Further information on handling

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

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drink, smoke, sniff.

Conditions for safe storage, including any incompatibilities**Requirements for storage rooms and vessels**

Keep container tightly closed. Keep in a cool, well-ventilated place. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep container tightly closed and in a well-ventilated place.

Hints on joint storage

Do not store together with: Oxidizing substances Explosives Combustible substances of acute toxicity, category 1 and 2 / very toxic substances

Further information on storage conditions

Store in a well-ventilated place. Keep container tightly closed. Store in a cool dry place.

8. Exposure controls/personal protection**Control parameters****Exposure limits**

| CAS No. | Substance | ppm | mg/m ³ | f/cc | Category | Origin |
|---------|-----------|------|-------------------|------|-----------|--------|
| 67-64-1 | Acetone | 1000 | 2400 | | TWA (8 h) | PEL |
| | | 250 | 590 | | TWA (8 h) | REL |

Additional advice on limit values

No information available.

Exposure controls**Appropriate engineering controls**

If handled uncovered, arrangements with local exhaust ventilation should be used if possible.

In use, may form flammable/explosive vapor-air mixture.

Use explosion-proof electrical equipment.

Use only non-sparking tools.

Protective and hygiene measures

When using do not eat or drink.

Do not breathe gas/fume/vapor/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 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: $\geq 0,7$ mm

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

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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.

Wear anti-static footwear and clothing

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

The filter class must be suitable for the maximum contaminant concentration (gas/vapor/aerosol/particulates) that may arise when handling the product. If the concentration is exceeded, self-contained breathing apparatus must be used.

Environmental exposure controls

Do not allow to enter into surface water or drains.

The vapors are heavier than air and can accumulate in high concentrations on the ground, in cavities, channels and cellars.

9. Physical and chemical properties

Information on basic physical and chemical properties

| | | |
|-----------------|-----------|----------------|
| Physical state: | Liquid | |
| Color: | colorless | |
| Odor: | resin | |
| pH-Value: | | not determined |

Changes in the physical state

| | | |
|---|--|----------------|
| Melting point/freezing point: | | not determined |
| Boiling point or initial boiling point and boiling range: | | 56 °C |
| Sublimation point: | | not determined |
| Softening point: | | not determined |
| Pour point: | | not determined |
| not determined: | | |

| | | |
|------------------------|--|-------------------|
| Flash point: | | < -20 °C |
| Sustaining combustion: | | No data available |

Flammability

| | | |
|---------------|--|----------------|
| Solid/liquid: | | not applicable |
| Gas: | | not applicable |

Explosive properties

not hazard of explosion according to EU A.14

| | | |
|----------------------------|--|-------------|
| Lower explosion limits: | | 2,5 vol. % |
| Upper explosion limits: | | 14,3 vol. % |
| Auto-ignition temperature: | | 535 °C |

Self-ignition temperature

| | | |
|--------|--|----------------|
| Solid: | | not applicable |
| Gas: | | not applicable |

| | | |
|----------------------------|--|----------------|
| Decomposition temperature: | | not determined |
|----------------------------|--|----------------|

Oxidizing properties

Not oxidising.

| | | |
|-------------------------------|--|---------|
| Vapor pressure: (at 20 °C) | | 246 hPa |
|-------------------------------|--|---------|

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| | |
|-------------------------------|--|
| Vapor pressure: (at 50 °C) | 814 hPa |
| Density (at 20 °C): | 1,08 g/cm ³ |
| Bulk density: | not determined |
| Water solubility: | The study does not need to be conducted because the substance is known to be insoluble in water. |

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: | 17,70 % |

Other information

Solid content: not determined

10. Stability and reactivity**Reactivity**

Highly flammable. No information available.

Chemical stability

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

Possibility of hazardous reactions

No hazardous reaction when handled and stored according to provisions.

Conditions to avoid

Keep away from sources of heat (e.g. hot surfaces), sparks and open flames. Vapors may form explosive mixtures with air. No information available.

Incompatible materials

No information available.

Hazardous decomposition products

No information available.

Further information

No information available.

11. Toxicological information**Information on toxicological effects****Toxicokinetics, metabolism and distribution**

No information available.

Acute toxicity

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

No information available.

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| CAS No | Components | | | | |
|---------|----------------------------------|---------------|---------|--------|--------|
| | Exposure route | Dose | Species | Source | Method |
| 67-64-1 | acetone; propan-2-one; propanone | | | | |
| | oral | LD50 mg/kg | 5800 | Rat | RTECS |
| | dermal | LD50 mg/kg | 20000 | Rabbit | IUCLID |
| | inhalation (4 h) vapour | LC50 | 76 mg/l | Rat | |

Irritation and corrosivity

Causes serious eye irritation

Skin corrosion/irritation: Based on available data, the classification criteria are not met.

Sensitizing effects

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

Carcinogenic/mutagenic/toxic effects for reproduction

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

No information available.

Specific target organ toxicity (STOT) - single exposure

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

No information available.

Specific target organ toxicity (STOT) - repeated exposure

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

No information available.

Carcinogenicity (OSHA): No ingredient of this mixture is listed.

Carcinogenicity (IARC): No ingredient of this mixture is listed.

Carcinogenicity (NTP): No ingredient of this mixture is listed.

Aspiration hazard

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

No information available.

Specific effects in experiment on an animal

No information available.

Additional information on tests

The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP].

Practical experience

No information available.

Information on other hazards**Other information**

No information available.

Further information

No information available.

12. Ecological information**Ecotoxicity**

@1501.B015603

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| CAS No | Components | | | | | |
|---------|----------------------------------|--------------|-----------|---------|-------------------------|--------|
| | Aquatic toxicity | Dose | [h] [d] | Species | Source | Method |
| 67-64-1 | acetone; propan-2-one; propanone | | | | | |
| | Acute fish toxicity | LC50 mg/l | 5540 | 96 h | Onchorhynchus mykiss | |
| | Acute crustacea toxicity | EC50 mg/l | 6100 | 48 h | Daphnia magna | |

Persistence and degradability

No information available.

Bioaccumulative potential

No information available.

Partition coefficient n-octanol/water

| CAS No | Components | Log Pow |
|---------|----------------------------------|---------|
| 67-64-1 | acetone; propan-2-one; propanone | -0,24 |

Mobility in soil

No information available.

Other adverse effects

No information available.

Further information

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

13. Disposal considerations**Waste treatment methods****Disposal recommendations**

Dispose of waste according to applicable legislation.

Contaminated packaging

Uncleaned empty containers may contain product gases which form explosive mixtures with air.

14. Transport information**US DOT 49 CFR 172.101**

| | |
|---|-----------|
| <u>UN/ID number:</u> | UN 1133 |
| <u>Proper shipping name:</u> | Adhesives |
| <u>Transport hazard class(es):</u> | 3 |
| <u>Packing group:</u> | III |
| Hazard label: | 3 |

**Marine transport (IMDG)**

| | |
|---|-----------|
| <u>UN number:</u> | UN 1133 |
| <u>UN proper shipping name:</u> | Adhesives |
| <u>Transport hazard class(es):</u> | 3 |
| <u>Packing group:</u> | III |
| Hazard label: | 3 |

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Special Provisions: 223, 955
 Limited quantity: 5 L
 Excepted quantity: E1
 EmS: F-E, S-D

Air transport (ICAO-TI/IATA-DGR)

UN number: UN 1133
UN proper shipping name: Adhesives
Transport hazard class(es): 3
Packing group: III
 Hazard label: 3



Special Provisions: A3
 Limited quantity Passenger: 10 L
 Passenger LQ: Y344
 Excepted quantity: E1
 IATA-packing instructions - Passenger: 355
 IATA-max. quantity - Passenger: 60 L
 IATA-packing instructions - Cargo: 366
 IATA-max. quantity - Cargo: 220 L

Environmental hazards

ENVIRONMENTALLY HAZARDOUS: Yes



Danger releasing substance: Novolack Epoxidharz

Special precautions for user

Warning: Combustible liquid.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

not applicable

15. Regulatory information**U.S. Regulations****National regulatory information**

SARA Section 304 CERCLA:
 Acetone (67-64-1): Reportable quantity = 5,000 (2270) lbs. (kg)
 SARA Section 311/312 Hazards:
 Acetone (67-64-1): Fire hazard, Immediate (acute) health hazard

State Regulations**Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65, State of California)**

This product can not expose you to chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

16. Other information**Changes**

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Revision No: 1,4

This data sheet contains changes from the previous version in section(s): 3,8,15.

Abbreviations and acronymsADR: Accord européen sur le transport 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 Harmonized 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

LC50: Lethal concentration, 50%

LD50: Lethal dose, 50%

Classification for mixtures and used evaluation method according to GHS

| Classification | Classification procedure |
|--------------------|--------------------------|
| Flam. Liq. 2; H225 | On basis of test data |
| Eye Irrit. 2; H319 | Calculation method |

Relevant H statements (full text)

| | |
|--------|---|
| H225 | Highly flammable liquid and vapor |
| H319 | Causes serious eye irritation |
| H336 | May cause drowsiness or dizziness |
| EUH066 | Repeated exposure may cause skin dryness or cracking. |

Other data

The information is based on the present level of our knowledge. It does not, however, give assurance of product properties and establishes no contract legal rights. The receiver of our product is singularly responsible for adhering to existing laws and regulations.

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