

## EP 70 Komp. A

Revision date: 02/18/2021

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**1. Identification****Product identifier**

EP 70 Komp. A

Substance name: 4,4'-Methylenbis(cyclohexylamin)

CAS No: 1761-71-3

UFI: Q800-P0U6-Q00F-TVCA

**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 &amp; 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**

Acute toxicity: Acute Tox. 4 (oral)

Skin corrosion/irritation: Skin Corr. 1B

Specific target organ toxicity repeated or prolonged exposure: STOT RE 2

Hazardous to the aquatic environment: Aquatic Chronic 2

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

Harmful if swallowed

Causes severe skin burns and eye damage

May cause damage to organs through prolonged or repeated exposure

Toxic to aquatic life with long lasting effects

**Precautionary statements**

Call a poison center if you feel unwell.

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

Do not breathe the mist/vapors/spray

**Special labelling of certain mixtures**

Restricted to professional users.

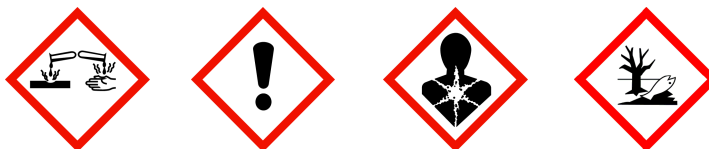
**Labelling of packages where the contents do not exceed 125 ml****Signal word:** Danger

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## Pictograms:



## Hazard statements

H314

## Precautionary statements

P280-P260

**Hazards not otherwise classified**

No information available.

**3. Composition/information on ingredients****Substances****Hazardous components**

CAS No	Components	Quantity
1761-71-3	4,4'-Methylenbis(cyclohexylamin)	100 %

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	
1761-71-3	217-168-8	4,4'-Methylenbis(cyclohexylamin)	100 %
		oral: ATE = 500 mg/kg	

**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**

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.

**Most important symptoms and effects, both acute and delayed**

No information available.

**Indication of any immediate medical attention and special treatment needed**

No information available.

**5. Fire-fighting measures****Extinguishing media**

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**Suitable extinguishing media**

Water spray jet, Dry extinguishing powder, Foam

**Unsuitable extinguishing media**

Full water jet

**Specific hazards arising from the chemical**

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

**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**

Do not breathe gas/vapor/spray. Provide adequate ventilation as well as local exhaust at critical locations. If technical exhaust or ventilation measures are not possible or insufficient, respiratory protection must be worn.

Use personal protection equipment. Personal protection equipment (PPE): see section 8

**For non-emergency personnel**

Remove persons to safety.

**For emergency responders**

Remove persons to safety. First aider: Pay attention to self-protection!

**Environmental precautions**

Do not allow to enter into surface water or drains.

Do not allow uncontrolled discharge of product into the environment.

**Methods and material for containment and cleaning up****For cleaning up**

Personal precautions, protective equipment and emergency procedures Avoid dust formation.

**Other information**

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

**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.

**Advice on protection against fire and explosion**

No special technical protective measures are necessary.

**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.

**Conditions for safe storage, including any incompatibilities**

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**Requirements for storage rooms and vessels**

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

**Further information on storage conditions**

No information available.

**8. Exposure controls/personal protection****Control parameters****Additional advice on limit values**

To date, no national critical limit values exist.

**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/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:  $\geq 0,7\text{mm}$

Suitable gloves type NBR (Nitrile rubber)

Breakthrough time:  $\geq 480\text{ min}$

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.

**9. Physical and chemical properties****Information on basic physical and chemical properties**

Physical state:	Liquid
Color:	light yellow
Odor:	Ammonia

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pH-Value: not determined

**Changes in the physical state**

Melting point/freezing point: not determined

Sublimation point: not determined

Softening point: not determined

Pour point: not determined

not determined:

Flash point: 160 °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: 300 °C

Decomposition temperature: not determined

**Oxidizing properties**

not determined

Vapor pressure:  
(at 20 °C) 0.005 hPa

Vapor pressure: not determined

Density (at 20 °C): 0,98 g/cm<sup>3</sup>

Bulk density: not determined

Water solubility: The substance is not soluble in water.

**Solubility in other solvents**

not determined

Partition coefficient n-octanol/water: not determined

Viscosity / dynamic:  
(at 20 °C) 80 mPa·s

Viscosity / kinematic: not determined

Flow time: not determined

Relative vapour density: not determined

Evaporation rate: not determined

Solvent separation test: not determined

Solvent content: 0

**Other information**

Solid content: not determined

No information available.

**10. Stability and reactivity**

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**Reactivity**

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**

No information available.

**Incompatible materials**

No information available.

**Hazardous decomposition products**

No information available.

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

No information available.

**Acute toxicity**

Harmful if swallowed

CAS No	Components				
	Exposure route	Dose	Species	Source	Method
1761-71-3	4,4'-Methylenbis(cyclohexylamin)				
	oral	ATE 500 mg/kg			

**Irritation and corrosivity**

Causes severe skin burns and eye damage

Causes serious eye damage

**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.

**Specific target organ toxicity (STOT) - single exposure**

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

**Specific target organ toxicity (STOT) - repeated exposure**

May cause damage to organs through prolonged or repeated exposure (4,4'-Methylenbis(cyclohexylamin))

Carcinogenicity (OSHA): Not listed.

Carcinogenicity (IARC): Not listed.

Carcinogenicity (NTP): Not listed.

**Aspiration hazard**

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

**Specific effects in experiment on an animal**

No information available.

**Additional information on tests**

No information available.

**Practical experience**

No information available.

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**Information on other hazards****Other information**

No information available.

**Further information**

No information available.

**12. Ecological information****Ecotoxicity**

No information available.

**Persistence and degradability**

No information available.

**Bioaccumulative potential**

No information available.

**Mobility in soil**

No information available.

**Other adverse effects**

No information available.

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

Dispose of waste according to applicable legislation.

**14. Transport information****US DOT 49 CFR 172.101****UN/ID number:**

UN 2735

**Proper shipping name:**

AMINES, LIQUID, CORROSIVE, N.O.S.

**Transport hazard class(es):**

8

**Packing group:**

I

Hazard label:

8

**Marine transport (IMDG)****UN number:**

UN 2735

**UN proper shipping name:**AMINES, LIQUID, CORROSIVE, N.O.S.  
(4,4'-Methylenbis(cyclohexylamine))**Transport hazard class(es):**

8

**Packing group:**

II

Hazard label:

8



Special Provisions:

274

Limited quantity:

1L

Excepted quantity:

E0

EmS:

F-A, S-B

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**Air transport (ICAO-TI/IATA-DGR)**

**UN number:** UN 2735  
**UN proper shipping name:** AMINES, LIQUID, CORROSIVE, N.O.S.,  
 (4,4'-Methylenbis(cyclohexylamine))  
**Transport hazard class(es):** 8  
**Packing group:** I  
 Hazard label: 8



Special Provisions: A3 A803  
 Limited quantity Passenger: Forbidden  
 Passenger LQ: Forbidden  
 Excepted quantity: E0  
 IATA-packing instructions - Passenger: 850  
 IATA-max. quantity - Passenger: 0.5 L  
 IATA-packing instructions - Cargo: 854  
 IATA-max. quantity - Cargo: 2.5 L

**Environmental hazards**

ENVIRONMENTALLY HAZARDOUS: No

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

No transport as bulk according to IBC Code.

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

SARA Section 311/312 Hazards:

4,4'-Methylenbis(cyclohexylamin) (1761-71-3): Immediate (acute) health hazard, Delayed (chronic) 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**

Revision date: 02/18/2021

Revision No: 1,2

This data sheet contains changes from the previous version in section(s): 1,3,6,9.

**Relevant H statements (full text)**

H302 Harmful if swallowed  
 H314 Causes severe skin burns and eye damage  
 H318 Causes serious eye damage  
 H373 May cause damage to organs through prolonged or repeated exposure  
 H411 Toxic to aquatic life with long lasting effects