

Section 1 – Identification of the substance/mixture and of the company/undertaking

1.1 Product identifiers:

Product Name: 1-(4-Hydroxybutyl)-4-methyl-piperazine

Product No.: 1846

Synonyms:

REACH No.: A registration number is not available for this substance as the substance or its uses are exempted from registration, the annual tonnage does not require a registration or the registration is envisaged for a later registration deadline.

CAS No.: [56323-03-6]

EC No.: 673-563-9

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

Identified uses: Laboratory chemicals, Manufacture of substances. Research and Development.

1.3 Details of the supplier of the safety data sheet:

Company: CHES Chemische Entwicklungs- und Synthese-Service GmbH
Difffenéstr 27, 68169 Mannheim, Germany

Phone/Fax: Phone: +49-621 / 318 9794, Fax +49-621 / 318 9691
Web/E-Mail: www.chess-chem.com, E-Mail: sales@chess-chem.com

1.4 Emergency telephone number:

Emergency Phone # +49 621 318 97 94

Section 2 - Hazards Identification

2.1 Classification of the substance or mixture:

Classification according to Regulation (EC) No 1272/2008

Acute Tox. 4 (H302, H312, H332); Skin Corr./Irritation 2 (H315); Serious Eye Damage/Irritation 2A (H319), H302, H312, H315, H319, H332

For the full text of the H-Statements mentioned in this Section, see Section 16.

2.2 Label elements

Labelling according Regulation (EC) No 1272/2008

Piktograms



GHS07

!

Signal word: Warning

Hazard Statement(s):

H302 Harmful if swallowed. H312 Harmful in contact with skin. H315 Causes skin irritation. H319 Causes serious eye irritation. H332 Harmful if inhaled.

Precautionary Statement(s):

P261 Avoid breathing dust/fume/gas/mist/vapours/spray. P264 Wash hands thoroughly after handling. P280 Wear protective gloves/protective clothing/eye protection/face protection. P301+P312 IF SWALLOWED: call a POISON CENTER or doctor/physician IF you feel unwell. P302+P352 IF ON SKIN: wash with plenty of soap and water. P304+P312 IF INHALED: Call a POISON CENTER or doctor/physician if you feel unwell. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P403+P233 Store in a well-ventilated place. Keep container tightly closed.

Supplemental Hazard Statements: none

2.3 Other hazards:

No data available

All the chemical, physical and toxicological properties have not been thoroughly investigated.

Section 3: Composition/information on ingredients

3.1 Substances:

Chemical Name: 1-(4-Hydroxybutyl)-4-methyl-piperazine, >98 %
Formula: C9H20N2O
Molecular Weight: 172.27 g/mol
CAS#: [56323-03-6]
EC#: 673-563-9

Hazardous ingredients according to Regulation (EC) No 1272/2008

Component	Classification	Concentration
1-(4-Hydroxybutyl)-4-methyl-piperazine		
CAS#: [56323-03-6] EC#: 673-563-9	Acute Tox. 4 (H302, H312, H332); Skin Corr./Irritation 2 (H315); Serious Eye Damage/Irritation 2A (H319), H302, H312, H315, H319, H332	<= 100%

For the full text of the H-Statements mentioned in this Section, see Section 16

Section 4 - First Aid Measures

4.1 Description of first aid measures:

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact

Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Consult a physician.

In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

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

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11.

4.3 Indication of any immediate medical attention and special treatment needed:

No data available.

Section 5 - Fire Fighting Measures

5.1 Extinguishing media

Suitable extinguishing media:

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Special hazards arising from the substance or mixture:

no data available

5.3 Advice for firefighters:

Wear self contained breathing apparatus for fire fighting if necessary.

5.4 Further information:

no data available

Section 6 - Accidental Release Measures**6.1 Personal precautions, protective equipment and emergency procedures:**

Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

For personal protection see section 8.

6.2 Environmental precautions:

Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up:

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

6.4 Reference to other sections:

For disposal see section 13.

Section 7 - Handling and Storage**7.1 Precautions for safe handling:**

Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.

For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities:

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

Store at room temperature.

7.3 Specific end use(s):

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

Section 8 - Exposure Controls, Personal Protection**8.1 Control parameters:****Components with workplace control parameters****8.2 Exposure controls:****Appropriate engineering controls**

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment:**Eye/face protection**

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

e.g. Material: Nitrile rubber, minimum layer thickness: 0,11 mm, break through time: 480 min
Material tested: Dermatri® (KCL 740)

Body Protection

Complete suit protecting against chemicals. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure

Do not let product enter drains.

Section 9 - Physical and Chemical Properties

a) Appearance	Form: liquid Colour: colorless to pale yellow
b) Odour	n/a
c) Odour Threshold	n/a
d) pH	n/a
e) Melting point/ freezing point	n/a
f) Initial boiling point and boiling range	88-90 °C/0.3 mbar
g) Flash point	n/a
h) Evaporation rate	n/a
i) Flammability (solid, gas)	n/a
j) Upper/lower flammability or explosive limits	n/a / n/a
k) Vapour pressure	n/a
l) Vapour density	n/a
m) Relative density	n/a
n) Water solubility	n/a
o) Partition coefficient: octanol/water	n/a
p) Auto-ignition temperature	n/a
q) Decomposition temperature	n/a
r) Viscosity	n/a
s) Explosive properties	n/a
t) Oxidizing properties	n/a

Section 10 - Stability and Reactivity**10.1 Reactivity**

no data available

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

no data available

10.4 Conditions to avoid

Heat, sparks, open flames

10.5 Incompatible materials

strong oxidizing agents, strong acids, acid chlorides, acid anhydrides

10.6 Hazardous decomposition products

Hazardous decomposition products formed under fire conditions: Carbon monoxide, Carbon dioxide, Nitrogen oxides
Other decomposition products - no data available
In the event of fire: see section 5

Section 11 - Toxicological Information**11.1 Information on toxicological effects****Acute toxicity**

no data available

Skin corrosion/irritation

no data available



Safety Data Sheet

according to Regulation (EC) No. 1907/2006
Creation Date: 26.01.2003
Version 2, Revision Date: 29.04.2024
Print Date: 29.04.2024

MSDS Name: 1-(4-Hydroxybutyl)-4-methyl-piperazine

Catalogue #: 1846

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Serious eye damage/eye irritation

no data available

Respiratory or skin sensitisation

no data available

Germ cell mutagenicity

no data available

Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

Reproductive toxicity

no data available

Specific target organ toxicity - single exposure

no data available

Specific target organ toxicity - repeated exposure

no data available

Aspiration hazard

no data available

Additional Information

RTECS: No results for CAS# search in RTECS.

All the chemical, physical and toxicological properties have not been thoroughly investigated.

Section 12 - Ecological Information

12.1 Toxicity

no data available

12.2 Persistence and degradability

no data available

12.3 Bioaccumulative potential

no data available

12.4 Mobility in soil

no data available

12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

12.6 Other adverse effects

no data available

Section 13 - Disposal Considerations

13.1 Waste treatment methods

Product

Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

Contaminated packaging

Dispose of as unused product.

Section 14 - Transport Information

14.1 UN number

ADR/RID: n/a IMDG: n/a IATA: n/a

14.2 UN proper shipping name

ADR/RID: Classed non-hazardous for shipping.
IMDG: Classed non-hazardous for shipping.
IATA: Classed non-hazardous for shipping.

14.3 Transport hazard class(es)

ADR/RID: n/a IMDG: n/a IATA: n/a



Safety Data Sheet

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Catalogue #: 1846

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14.4 Packaging group

ADR/RID: n/a IMDG: n/a IATA: n/a

14.5 Environmental hazards

ADR/RID: no IMDG Marine pollutant: no IATA: no

14.6 Special precautions for user

no data available

Section 15 - Regulatory Information

European Information:

Hazard Statement(s): H302, H312, H315, H319, H332

H302 Harmful if swallowed. H312 Harmful in contact with skin. H315 Causes skin irritation. H319 Causes serious eye irritation. H332 Harmful if inhaled.

Precautionary Statement(s): P261, P264, P280, P301+P312, P302+352, P304+312, P305 + P351 + P338, P403+P233

P261 Avoid breathing dust/fume/gas/mist/vapours/spray. P264 Wash hands thoroughly after handling. P280 Wear protective gloves/protective clothing/eye protection/face protection. P301+P312 IF SWALLOWED: call a POISON CENTER or doctor/physician IF you feel unwell. P302+P352 IF ON SKIN: wash with plenty of soap and water. P304+P312 IF INHALED: Call a POISON CENTER or doctor/physician if you feel unwell. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P403+P233 Store in a well-ventilated place. Keep container tightly closed.

ESIS:

No results for CAS# search in ESIS 673-563-9

US Federal:

TSCA: CAS# TSCA: Not listed.

SARA 302 components: No chemicals in this material are subject to the reporting requirements of SARA title III, section 302.

SARA 313 components: No chemicals in this material are subject to the reporting requirements of SARA title III, section 313.

New Jersey Right to Know Components: This product may contain a chemical on the NJ Right to Know Components List.

California Prop. 65 Components: This product may contain a chemical known to the State of CA to cause cancer, birth defects, or other reproductive harm.

This product is for research and development use only.

Section 16 - Other Information

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. CHESS shall not be held liable for any damage resulting from handling or from contact with the above product.