

Safety Data Sheet

HEPES Buffer Solution (1M)

According to Regulation (EC) No. 1907/2006 (REACH)

Date of Compilation 06.04.2021

Revision Date 11.01.2024

Version 002/01.2024

Replaces Version of 06.04.2021 (Version 001/01.2021)

Section 1 Identification of the Substance/Mixture and of the Company/Undertaking

Product Identifiers

Product name: HEPES Buffer Solution (1M)

Catalogue No: HEP-B

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.

Relevant Identified Uses of the Substance or Mixture and Uses Advised Against

Identified uses: For research use only. Not intended for human or animal diagnostic or therapeutic uses.

Details of the Supplier of the Safety Data Sheet

Company: Capricorn Scientific GmbH
Auf der Lette 13 A
35085 Ebsdorfergrund
Germany
Phone: +49 6424 94464 0
E-Mail: info@capricorn-scientific.com

Emergency Telephone Number

Emergency Phone: During Office Time: +49 6424 94464 0.

Section 2 Hazards Identifications

Classification of the substance or mixture

Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

Label elements

Not a hazardous substance or mixture.

Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

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Section 3 Composition/Information on Ingredients

Chemical composition:

Mixtures

Synonyms: HEPES
N-(2-Hydroxyethyl)piperazine-N'-(2-ethanesulfonic acid))

No components need to be disclosed according to the applicable regulations.

Section 4 First Aid Measures

Description of first aid measures

If inhaled If breathed in, move person into fresh air. If not breathing, give artificial respiration.

In case of skin contact Wash off with soap and plenty of water.

In case of eye contact Rinse out with plenty of water, also under the eyelids.

If swallowed Never give anything by mouth to an unconscious person. Rinse mouth with water.

Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11.

Indication of any immediate medical attention and special treatment needed

No data available.

Section 5 Firefighting Measures

Extinguishing media

Suitable extinguishing media

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

Special hazards arising from the substance or mixture

Carbon oxides, Nitrogen oxides (NO_x), Sulphur oxides

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Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

Further information

No data available

Section 6 Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

Avoid breathing vapours, mist or gas.
For personal protection see section 8.

Environmental precautions

No special precautionary measures necessary.

Methods and materials for containment and cleaning up

Keep in suitable, closed containers for disposal. Soak up with inert absorbent material.

Reference to other sections

For disposal see section 13.

Section 7 Handling and Storage

Precautions for safe handling

For precautions see section 2

Conditions for safe storage, including any incompatibilities

Store in cool place at 2-8°C. Keep container tightly closed in a dry and well-ventilated place.

Specific end use(s)

Apart from the uses mentioned in section 1 no other specific uses are stipulated.

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Section 8 Exposure Controls/Personal Protection

Control parameters

Components with workplace control parameters

Exposure controls

Appropriate engineering controls

General industrial hygiene practice.

Personal protective equipment

Eye/face protection

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 Regulation (EU) 2016/425 and the standard EN 374 derived from it.

Body protection

Lightweight protective clothing.

Respiratory protection

In case of insufficient ventilation, wear suitable respiratory equipment.

Control of environmental exposure

No special precautionary measures necessary.

Section 9 Physical and Chemical Properties

Information on basic physical and chemical properties

Appearance

Odor

pH

Melting/freezing point

Form: colorless liquid

Odorless

7.0 – 7.6

No data available.

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Initial boiling point and range	No data available.
Flash point	No data available.
Evaporation rate	No data available.
Flammability (solid, gas)	No data available.
Upper/lower flammability or exposure limits	No data available.
Vapor pressure	No data available.
Vapor density	No data available.
Relative density	No data available.
Water solubility	Soluble
Partition coefficient: n-octanol/water	No data available.
Auto-ignition temperature	No data available.
Decomposition temperature	No data available.
Viscosity	No data available.
Explosive properties	No data available.
Oxidizing properties	No data available.

Other safety information

No data available.

Section 10 Stability and Reactivity

Reactivity

No data available.

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

No data available.

Conditions to avoid

No data available.

Incompatible materials

Strong oxidizing agents.

Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides, Nitrogen oxides (NO_x), Sulphur oxides

Other decomposition products - No data available

In the event of fire: see section 5.

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Section 11 Toxicological Information

Information on toxicological effects

Acute toxicity

No data available.

Skin corrosion/irritation

No data available.

Serious eye damage/eye irritation

No data available.

Respiratory or skin sensitization

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 data available.

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Section 12 Ecological Information

Toxicity

No data available.

Persistence and degradability

No data available.

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Bioaccumulative potential

No data available.

Mobility in soil

No data available.

Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher

Other adverse effects

No data available.

Section 13

Disposal Considerations

Waste treatment methods

Product

Offer surplus and non-recyclable solutions to a licensed disposal company.

Contaminated packaging

Dispose of as unused product.

Section 14

Transport Information

UN-number

ADR/RID: -

IMDG: -

IATA: -

UN proper shipping name

ADR/RID: Not dangerous goods

IMDG: Not dangerous goods

IATA: Not dangerous goods

Transport hazard class(es)

ADR/RID: -

IMDG: -

IATA: -

Packaging group

ADR/RID: -

IMDG: -

IATA: -

Environmental hazards

ADR/RID: no

IMDG Marine pollutant: no

IATA: no

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Special precautions for user

Further information

Not classified as dangerous in the meaning of transport regulations.

Section 15

Regulatory Information

In compliance with local and national regulations, this product is classified and labelled in accordance with Directive 1999/45/EC.

Label according to EWG-regulations:

Code and Hazard declaration: Not dangerous

Dangerous components requiring special labelling: Not applicable

International Inventories:

Classification according to VbF: Not applicable

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. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product.