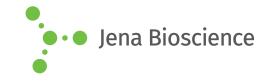
according to Regulation (EC) No. 1907/2006



Hexadecyltrimethylammonium Bromide - 0.05 M

Cetyltrimethylammonium bromide

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product Name: Hexadecyltrimethylammonium Bromide - 0.05 M

Catalog Number: CSS-395

Supplier: Jena Bioscience GmbH

Loebstedter Strasse 71 07749 Jena, Germany +49 - 3641 - 62 85 000

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 +49 - 3641 - 62 85 100

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 info@jenabioscience.com

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 http://www.jenabioscience.com

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Eye Irrit. 2 (Category 2), H319 Aquatic Chronic 3 (Category 3), H412

2.2 Label elements

Labelling according Regulation (EC) No 1272/2008



Pictogram
Signal word
Warning

Hazard statement(s)

H319 Causes serious eye irritation.

H412 Harmful to aquatic life with long lasting effects.

Precautionary statement(s)

P273 Avoid release to the environment.

P280 Wear protective gloves/ eye protection/ face protection.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing.

P337 + P313 If eye irritation persists: Get medical advice/attention.

P501 Dispose of contents/ container to an approved waste disposal plant.

Supplemental Hazard Statements

none

according to Regulation (EC) No. 1907/2006



Hexadecyltrimethylammonium Bromide - 0.05 M

Cetyltrimethylammonium bromide

2.3 Other hazards

none

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixtures

Hexadecyltrimethylammonium Bromide 1,8 %

Synonyms: Cetrimonium bromide, Palmityltrimethylammonium bromide, CTAB, Cetyltrimethylammonium bromide

Formula: $CH_3(CH_2)_{15}N(Br)(CH_3)_3$

 Molecular Weight:
 364.45 g/mol

 CAS-No.:
 57-09-0

 EC number:
 200-311-3

Classification:

Concentration: 0.05 M

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

Acute Tox. 4, H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT Single 3, H335 Aquatic Acute 1, H400 Aquatic Chronic 1, H410

4. 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

Flush eyes with water as a precaution.

If swallowed

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

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

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

Special protective equipment for fire-fighters

Wear self contained breathing apparatus for fire fighting if necessary.

according to Regulation (EC) No. 1907/2006



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6. ACCIDENTAL RELEASE MEASURES

Personal precautions

Avoid dust formation.

Environmental precautions

Do not let product enter drains.

Methods and materials for containment and cleaning up

Sweep up and shovel. Keep in suitable, closed containers for disposal.

7. HANDLING AND STORAGE

Handling

Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.

Storage

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

Recommended storage temperature: store at 4 °C

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Personal protective equipment

Respiratory protection

Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Hand protection

For prolonged or repeated contact use protective gloves.

Eye protection

Safety glasses

Hygiene measures

General industrial hygiene practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

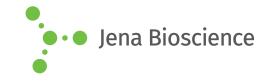
Form: liquid

Safety data

рН:

Melting point: no data available

according to Regulation (EC) No. 1907/2006



Hexadecyltrimethylammonium Bromide - 0.05 M

Cetyltrimethylammonium bromide

Boiling point: no data available
Flash point: no data available
Ignition temperature: no data available
Lower explosion limit: no data available
Upper explosion limit: no data available
Water solubility: no data available

10. STABILITY AND REACTIVITY

Storage stability

Stable under recommended storage conditions.

Materials to avoid

Strong oxidizing agents.

Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides, nitrogen oxides (NOx), Oxides of phosphorus, Lithium oxides.

11. TOXICOLOGICAL INFORMATION

Acute toxicity

LD50 Oral (rat) 410 mg/kg (Hexadecyltrimethylammonium Bromide)

Irritation and corrosion

no data available

Sensitisation

no data available

Chronic exposure

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.

Signs and Symptoms of Exposure

Dermatitis

Potential Health Effects

Inhalation: May be harmful if inhaled. May cause respiratory tract irritation.

Skin: May be harmful if absorbed through skin. May cause skin irritation.

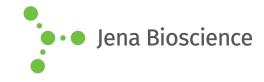
Eyes: May cause eye irritation.
Ingestion: May be harmful if swallowed.

Target Organs: Liver, Kidney

12. ECOLOGICAL INFORMATION



according to Regulation (EC) No. 1907/2006



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Toxicity

Toxicity to fish LC50 Danio rerio (zebra fish)-0,3 mg/l-96,0 h
Toxicity to daphnia and other Daphnia magna (Water flea)-0,03 mg/l-48 h
aquatic invertebrates EC50

Elimination information (persistence and degradability)

no data available

Ecotoxicity effects

no data available

Further information on ecology

Very toxic to aquatic life with long lasting effects.

13. DISPOSAL CONSIDERATIONS

Product

Observe all federal, state, and local environmental regulations.

Contaminated packaging

Dispose of as unused product.

14. TRANSPORT INFORMATION

14.1 UN number

Not dangerous goods

14.2 UN proper shipping name

ADR/RID: Not dangerous goods IMDG: Not dangerous goods IATA: Not dangerous goods

14.3 Transport hazard class(es)

ADR/RID/IMDG/IATA: Not dangerous goods

14.4 Packaging group

ADR/RID/IMDG/IATA: Not dangerous goods

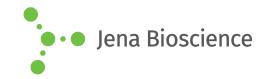
14.5 Environmental hazards

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

14.6 Special precautions for user

see chapter 6 - 8

according to Regulation (EC) No. 1907/2006



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15. REGULATORY INFORMATION

Labelling according to EC Directives

The product does not need to be labelled in accordance with EC directives or respective national laws.

16. OTHER INFORMATION

Further information

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