

SAFETY DATA SHEET



Product name: Cetyl Ethyl Dimethyl Ammonium Bromide (CEDAB)
Revision Date: 2009-08-28

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Print date: 2009-08-28
SDS-ID: GB/7.0

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

Product name: Cetyl Ethyl Dimethyl Ammonium Bromide (CEDAB)

Application: Conditioner and emulsifier for the cosmetics industry. Container size: 25kg

Supplier: FeF Chemicals A/S
Københavnsvej 216
DK-4600 Køge
Tel.: +45 56 67 10 00

Responsible for safety data sheet authoring:
SDS_info@dhigroup.com

2. HAZARDS IDENTIFICATION

The product is classified: Xn;R22 Xi;R38-R41 N;R50

Human health: Harmful if swallowed. Risk of serious damage to eyes. Irritating to skin.

Environment: Very toxic to aquatic organisms.

3. COMPOSITION/INFORMATION ON INGREDIENTS

The product contains: quaternary ammonium compounds.

<u>%:</u>	<u>CAS-No.:</u>	<u>EC No.:</u>	<u>Chemical name:</u>	<u>Hazard classification:</u>	<u>Notes:</u>
100	124-03-8	204-672-8	Hexadecylethyldimethylammonium bromide	Xn;R22 Xi;R38-41 N;R50	

4. FIRST-AID MEASURES

Inhalation: Dust inhalation: In case of problems: Move injured person into fresh air and keep person calm under observation. If uncomfortable: Seek hospital and bring these instructions.

Skin contact: Remove contaminated clothes and rinse skin thoroughly with water. If irritation persists: Seek medical attention and bring along these instructions.

Eye contact: Do not rub eye. Immediately flush with plenty of water for up to 15 minutes. Remove any contact lenses and open eyelids widely. If irritation persists: Continue flushing during transport to hospital. Bring these instructions.

Ingestion: Immediately rinse mouth and drink plenty of water. Keep person under observation. If person becomes uncomfortable seek hospital and bring these instructions.

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5. FIRE-FIGHTING MEASURES

Extinguishing media: Use fire-extinguishing media appropriate for surrounding materials.

Specific hazards: During fire, gases hazardous to health may be formed. (HBr, NOx)

Protective equipment for fire-fighters: Selection of respiratory protection for fire fighting: follow the general fire precautions indicated in the workplace.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions: Avoid inhalation of dust and contact with skin and eyes. Use work methods which minimise dust production. For personal protection, see section 8.

Environmental precautions: Do not discharge into drains, water courses or onto the ground.

Methods for cleaning up: Collect spillage with shovel, broom or the like. Flush contaminated area with plenty of water. For waste disposal, see section 13.

7. HANDLING AND STORAGE

Safe handling advice: Avoid inhalation of dust and contact with skin and eyes. Change contaminated clothing. Observe good chemical hygiene practices.

Technical measures: Use work methods which minimise dust production. Avoid spreading dust.

Technical precautions: Provide easy access to water supply and eye wash facilities.

Technical measures for safe storage: No special precautions.

Storage conditions: Store in closed original container. Do not store near heat sources or expose to excessive temperatures.

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8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering measures: Provide adequate ventilation. Observe occupational exposure limits and minimize the risk of inhalation of dust. An eye wash bottle must be available at the work site.

<u>Chemical name:</u>	<u>Exposure limits:</u>	<u>Type:</u>	<u>Notes:</u>	<u>References:</u>
Dusts non-specific-respirable	4 mg/m ³	TWA	-	EH40
Dusts non-specific-total inhalable	10 mg/m ³	TWA	-	EH40

Personal protection: Personal protection equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment

Respiratory equipment: During dust-raising work: Use respiratory equipment with particle filter, type P2. The use of filtering respirators should be limited to max. 3 hours per day.

Hand protection: Risk of contact: Wear protective gloves. Nitrile gloves are recommended.

Eye protection: Wear goggles/face shield.

Skin protection: Wear suitable protective clothing.

Hygiene measures: Wash hands after contact.

Environmental Exposure Controls: Not available.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: A white or almost white crystalline powder.

Odour: not available

pH: 5-6 (10g/l)

Melting point: 185-200 °C

Boiling point: not available

Decomposition temperature: >200 °C

Flash point: not relevant

Relative density: approx. 0,4

Solubility: 250 g/l in water (27 °C)

Other data: Explosive properties: No data available.
Other data: Cetrimide (Powder, dust):
Ignition temperature: 210 °C
Minimum Ignition Energy (mJ) 40-50
Risk of dust explosion: None under normal conditions.

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10. STABILITY AND REACTIVITY

Stability: Stable under normal temperature conditions.

Conditions/
materials to avoid: Heating. Strong oxidising substances.

Hazardous
decomposition products: If heated to more than 200°C, the following substance(s) will be released: Alkyl bromides.
Amines.

11. TOXICOLOGICAL INFORMATION

Inhalation: Dust may irritate the respiratory system.

Skin contact: Irritating to skin.

Eye contact: Risk of serious damage to eyes. Immediate first aid is necessary.

Ingestion: Harmful if swallowed. Causes stomach pain, vomiting, diarrhoea and convulsions.

Specific effects: None known.

12. ECOLOGICAL INFORMATION

Mobility: The product is water soluble and may spread in water systems.

Degradability: The product is expected to be biodegradable.
(quaternary ammonium compounds, FeF Chemicals A/S, 1993)

Ecotoxicity: Very toxic to aquatic organisms.

Expected LC/EC50 value (Hexadecylethyldimethylammonium bromide)
~ Alkyltrimethylammonium bromide (0,001 < LC50 ≤ 0,01 mg/l):
LC50 (Danio rerio, 96 hours): 1,2 mg/l (OECD Test Guideline 203)
EC50 (Daphnia magna, 48 hours): 0,03 mg/l (OECD Test Guideline 202)
IC50 (Pseudokirchneriella subcapitata, 72 hours): 0,008 mg/l (OECD Test Guideline 201)

Bioaccumulative
potential: Bioaccumulation: Is not expected to be bioaccumulable.

Other adverse effects: None known.

13. DISPOSAL CONSIDERATIONS

Dispose of waste and residues in accordance with local authority requirements. Waste is classified as hazardous waste.

Waste from residues: EWC-code: 07 06 07

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14. TRANSPORT INFORMATION

UN-number: 3077

Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.
(Hexadecylethyldimethylammonium bromide)

Other information:
The product is classified: Environmentally Hazardous substance

Sea (IMDG):

Class: 9
PG: III
MP: Yes
EmS: F-A , S-F
MFAG: 1

Inland waterways: To be handled locally.

Air (ICAO/IATA):

Class: 9
PG: III

Land (RID/ADR):

Class: 9
Packing group: III
Primary risk label: 9
Subsidiary risk label: -

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15. REGULATORY INFORMATION

Labelling:

Contains: Hexadecylethyldimethylammonium bromide



Harmful



Dangerous for the environment

- R22 Harmful if swallowed.
R38 Irritating to skin.
R41 Risk of serious damage to eyes.
R50 Very toxic to aquatic organisms.
- S22 Do not breathe dust.
S24/25 Avoid contact with skin and eyes.
S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S39 Wear eye/face protection.
S60 This material and its container must be disposed of as hazardous waste.
S61 Avoid release to the environment. Refer to special instructions/safety data sheets.

EC-No.: 204-672-8

National regulation:

Statutory Instruments 2008 No. 2852 - The REACH Enforcement Regulations 2008.
The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (S.I 2009 No. 716).
The Control of Substances Hazardous to Health Regulations 2002 (S.I 2002 No. 2677) with amendments.
EH40/2005, Workplace exposure limits 2005, with amendments
The List of Wastes (England) (Amendment) Regulations 2005. (SI 2005 No. 895).

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16. OTHER INFORMATION

The user must be instructed in the proper work procedure and be familiar with the contents of these instructions.

The following sections contain revisions or new statements: 9, 12, 14, 15, 16.

Classification according to Regulation (EC) No. 1272/2008:

Acute Tox. 4;H302 - Skin Irrit. 2;H315 - Eye Dam. 1;H318 - Aquatic Acute 1;H400

Wording of Risk Phrases:

R22	Harmful if swallowed.
R38	Irritating to skin.
R41	Risk of serious damage to eyes.
R50	Very toxic to aquatic organisms.

H302	Harmful if swallowed.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H400	Very toxic to aquatic life.

The information on this data sheet represents our current data and is reliable provided that the product is used under the prescribed conditions and in accordance with the application specified on the packaging and/or in the technical guidance literature. Any other use of the product which involves using the product in combination with any other product or any other process is the responsibility of the user.

Made by DHI - Centre for Environment and Toxicology, Artillerivej 5, DK-2970 Hørsholm, Denmark. www.dhigroup.com.