

SAFETY DATA SHEET



Product name: Cetalkonium Chloride (CKC)
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: Cetalkonium Chloride (CKC)
Application: Preservative and active ingredient in the cosmetic and pharmaceutical industries.. Container size: 20kg
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; R21/22 C; R34 N; R50

Human health: Harmful in contact with skin and if swallowed. Corrosive to skin and eyes. Repeated or prolonged contact with skin may cause allergic reactions in sensitive individuals.

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	122-18-9	204-526-3	Benzyl(hexadecyl)dimethyl-ammonium chloride	C;R34 Xn;R21/22 N;R50	

4. FIRST-AID MEASURES

Inhalation: Dust inhalation: 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: Immediately flush with plenty of water. Remove any contact lenses and open eyes wide apart. Call an ambulance and continue flushing during transportation to hospital. Bring these instructions.

Ingestion: Immediately rinse mouth and drink plenty of water. Call an ambulance. Bring along these instructions. Do not induce vomiting.

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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.
Water used for fire extinguishing, which has been in contact with the product, may be corrosive.

Protective equipment for fire-fighters: Use air-supplied respirator during fire fighting. Severe corrosive hazard. Wear chemical protection suit.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions: Look out! The product is corrosive.
Avoid inhalation of dust and contact with skin and eyes. Use work methods which minimise dust production. Follow precautions for safe handling described in this safety data sheet. 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. Observe good chemical hygiene practices. Change contaminated clothing.

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 Not available.

Controls:

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: A white or almost white crystalline powder.

Odour: not available

pH: 5-8 (100 g/l)

Melting point: 50°C

Boiling point: not available

Decomposition temperature: 150-300°C

Flash point: not relevant

Relative density: approx. 0,4

Solubility: 8,5 g/l in water (25 °C)

Other data: Explosive properties: No data available.
Other data: Cetrime (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 150°C, the following substance(s) will be released: Benzyl chloride and Methyl chloride.

11. TOXICOLOGICAL INFORMATION

Inhalation: Dust is corrosive. Risk of: Burning pain. Increased flow of saliva (froth at the mouth) and vomiting, sometimes with bloody vomit. Restlessness, confusion and weakness, laboured breathing, bluish colouring of skin and mucous membranes, shock and unconsciousness.

Skin contact: Harmful in contact with skin. Dust on moist skin: Causes burns. Repeated or prolonged contact with skin may cause allergic reactions in sensitive individuals.

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

Ingestion: Harmful if swallowed. Causes burns. Burning pain. Increased flow of saliva (froth at the mouth) and vomiting, sometimes with bloody vomit. Restlessness, confusion and weakness, laboured breathing, bluish colouring of skin and mucous membranes, shock and unconsciousness.

Specific effects: May cause sensitisation.

12. ECOLOGICAL INFORMATION

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

Degradability: The product is easily biodegradable.
Degradability: approx. 70% (FeF Chemicals A/S, 1993)

Ecotoxicity: Very toxic to aquatic organisms.
Benzalkonium chloride (0,01 < EC50 ≤ 0,1 mg/l):
LC50 (Danio rerio, 96 hours): 0,31 mg/l
EC50 (Daphnia magna, 48 hours): 0,02 mg/l
IC50 (Pseudokirchneriella subcapitata, 72 hours): 0,07 mg/l

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

Other adverse effects: None known.

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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 05 07
07 06 07

14. TRANSPORT INFORMATION

UN-number: 3261

Proper shipping name: CORROSIVE SOLID, ACIDIC, ORGANIC, N.O.S.
(Benzalkonium chloride)

Other information:
The product is classified: Environmentally Hazardous substance

Sea (IMDG):

Class: 8
PG: III
MP: Yes
EmS: F-A , S-B
MFAG: 1

Inland waterways: To be handled locally.

Air (ICAO/IATA):

Class: 8
PG: III

Land (RID/ADR):

Class: 8
Packing group: III
Primary risk label: 8
Subsidiary risk label: -

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15. REGULATORY INFORMATION

Labelling:

Contains: Benzyl(hexadecyl)dimethyl-ammonium chloride



Corrosive



Dangerous for the environment

- R21/22 Harmful in contact with skin and if swallowed.
R34 Causes burns.
R50 Very toxic to aquatic organisms.
- 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.
S36/37/39 Wear suitable protective clothing, gloves and eye/face protection.
S45 In case of accident or if you feel unwell, seek medical advice immediately (show label where possible).
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 label.
EC-No.: 204-526-3

As a general rule, persons under 18 years of age are not allowed to work with this product. Users must be carefully instructed in the proper work procedure, the dangerous properties of the product and the necessary safety instructions.

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 Management of Health and Safety at Work Regulations 1999 (SI 1999 No. 3242).
The List of Wastes (England) (Amendment) Regulations 2005. (SI 2005 No. 895).

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16. OTHER INFORMATION

For restrictions on use see section 15.

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 - Acute Tox. 4;H312 - Skin Corr. 1B;H314 - Aquatic Acute 1;H400

Wording of Risk Phrases:

R21/22 Harmful in contact with skin and if swallowed.

R34 Causes burns.

R50 Very toxic to aquatic organisms.

H302 Harmful if swallowed.

H312 Harmful in contact with skin.

H314 Causes severe skin burns and 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.

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