

MATERIAL SAFETY DATA SHEET

Rocamix - Octadecyl Trimethyl Ammonium Chloride 50% (OTAC 50%)

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

Product name: Rocamix - Octadecyl Trimethyl Ammonium Chloride (Organic surfactant OTAC)

Application: For use as an additive to soil ground

Supplier: LVYU CHEMICAL CO.,LTD, JINGJIANG CITY, JIANGSU PROVINCE, CHINA.

Qualification Manufacturer:ISO 4000 n° 112E20260R0M-2 - ISO 8000 n°112Q20259R0M-2

Made for Consult MKH, owner of the patent Rocamix , INPI-Soleau No 482 714-260 613

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2. HAZARDS IDENTIFICATION

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

Environment: Used in high doses (greater than 50%) toxic to aquatic organisms.

3. COMPOSITION/INFORMATION ON INGREDIENTS

The product contains: Aqueous solution of quaternary ammonium compounds.

Composition

Monomers and polymers of organic origin

Chemical formula

Liquid solution of mixed poly-molecular interfacial active substances solvents, emulsifier and catalysis CAS 112-03-08 with a determined content of cellulose acetate CAS 9004-35-7 and complex carbohydrate composed of long chains of glucose units, joined by chemical glycoside links and unique components rocamix.

4. FIRST-AID MEASURES

Inhalation: Inhalation of aerosols: 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 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.

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. (HCl, NOx)

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

6. ACCIDENTAL RELEASE MEASURES

Personal precautions: Avoid inhalation of spray mist and contact with skin and eyes. 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:

Large spillages: Dam and absorb spillage with sand, sawdust or other absorbent.

Small spillages: Absorb spillage with suitable absorbent material.

Flush contaminated area with plenty of water. For waste disposal, see *section 13*.

7. HANDLING AND STORAGE

Safe handling advice: Observe good chemical hygiene practices. Avoid inhalation of spray mists and contact with skin and eyes. Immediately change drenched clothing.

Technical measures: Keep the workplace clean. Use work methods which minimize aerosol production.

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. +0°C to 40°C

Product life: The product kept in the described storage conditions has a useful life of 2.5 years. After this time Rocamix no longer guarantees its effect.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering measures: Provide adequate ventilation. Minimize the risk of formation of aerosols. An eye wash bottle must be available at the work site.

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: Risk of inhalation of spray mist: Use respiratory equipment with particle filter, type P2. The use of filtering respirators limited to max.3 hours/day.

Hand protection: Wear protective gloves. Nitrile gloves are recommended. The most suitable glove must be chosen in consultation with the gloves supplier, who can inform about the breakthrough time of the glove material.

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: colorless to light yellow liquid.

Odor: Not available

PH of 10% aqueous: 5-9

Boiling point: Not available

Flash point: Not available

Explosion limits: not relevant

Relative density: approx. 0.88

Solubility: Miscible with water and lower alcohols.

10. STABILITY AND REACTIVITY

Stability: Stable under normal temperature conditions.

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

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

11. TOXICOLOGICAL INFORMATION

Inhalation: Inhalation of aerosols: May cause irritation to 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. May cause nausea, stomach pain and vomiting.

Specific effects: None known.

12. ECOLOGICAL INFORMATION

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

Degradability: OTAC 50% < 20ppm: The product is expected to be biodegradable.

Eco toxicity: used in high doses (greater than 50%) toxic to aquatic organisms.

Alkyl trimethyl ammonium chloride (0,001 < EC50 ≤ 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)

Bio accumulative potential: Bioaccumulation: Is not expected to be bio accumulable.

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

14. TRANSPORT INFORMATION

Not available.

15. REGULATORY INFORMATION

Labelling: Rocamix - Octadecyl trimethyl ammonium chloride 50%

16. OTHER INFORMATION

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

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.