

Material Safety Data Sheet

1 - Product and Company Information

Product Name: 3-chloro-2-hydroxypropyltrimethylammonium chloride, 65WT. % SOLUTION

2 - Composition/Information on Ingredients

| CAS # | EC no | Annex I Index Number |
|-----------|-----------|----------------------|
| 3327-22-8 | 222-048-3 | None |
| | | |
| | | |

| Ingredient Name | Percent | CAS # | EC no | Annex I |
|---|---------|-----------|-----------|---------|
| 3-chloro-2-hydroxypropyltrimethylammonium | 65%MIN | 3327-22-8 | 222-048-3 | None |
| chloride | | | | |
| WATER | 35% MAX | 7732-18-5 | 231-791-2 | None |

Formula: C6H15CINO.Cl

Molecular Weight: 188.1 AMU

Synonyms: Catiomaster C * (3-Chloro-2-hydroxypropyl) trimethylammonium chloride * Dextrosil * Dextrosil KA * Dowquat 188 * NT 21 * QUAB * Quat 188 * 1-Propanaminium, 3-chloro-2-hydroxy-N,N,N-trimethyl-, chloride (9CI) * Verolan KAF

3 - Hazards Identification

SPECIAL INDICATION OF HAZARDS TO HUMANS AND THE ENVIRONMENT

Not hazardous according to Directive 67/548/EEC.

| 4 - First Aid Measures |
|---|
| AFTER INHALATION |
| If inhaled, remove to fresh air. If breathing becomes difficult, call a physician. |
| AFTER SKIN CONTACT |
| In case of contact, immediately wash skin with soap and copious amounts of water. |
| AFTER EYE CONTACT |
| In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids |
| with fingers. Call a physician. |
| AFTER INGESTION |
| If swallowed, wash out mouth with water provided person is conscious. Call a physician. |
| |
| 5 - Fire Fighting Measures |

5 - Fire Fighting Measures EXTINGUISHING MEDIA Suitable: Water spray. Carbon dioxide, dry chemical powder, or appropriate foam. SPECIAL RISKS



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Specific Hazard(s): Emits toxic fumes under fire conditions.

SPECIAL PROTECTIVE EQUIPMENT FOR FIREFIGHTERS

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

6 - Accidental Release Measures

METHODS FOR CLEANING UP

Absorb on sand or vermiculite and place in closed containers for disposal. Ventilate area and wash spill site after material pickup is complete.

7 - Handling and Storage

HANDLING

Directions for Safe Handling: Avoid inhalation. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure.

STORAGE

Conditions of Storage: Keep tightly closed.

8 - Exposure Controls / Personal Protection

ENGINEERING CONTROLS

Safety shower and eye bath. Mechanical exhaust required.

GENERAL HYGIENE MEASURES

Wash thoroughly after handling.

PERSONAL PROTECTIVE EQUIPMENT

Respiratory Protection: Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). Respiratory protection is not required. Where protection is desired, use multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges. Hand Protection: Protective gloves. Eye Protection: Chemical safety goggles.

Eye Hoteetion. Chemical safety goggies

| 9 - Physical and Chemical Properties | | |
|--------------------------------------|------------------------|----------------------------|
| Appearance | Physical State: Liquid | |
| Property | Value | At Temperature or Pressure |
| рН | 2.0 - 6.0 | |
| BP/BP Range | N/A | |
| MP/MP Range | 188 °C | |
| Flash Point | 113 °C | Method: closed cup |
| Flammability | N/A | |
| Autoignition Temp | N/A | |
| Oxidizing Properties | N/A | |
| Explosive Properties | N/A | |
| Explosion Limits | N/A | |
| Vapor Pressure | N/A | |
| SG/Density | 1.164 g/cm3 | |
| Partition Coefficient | N/A | |
| Viscosity | N/A | |
| Vapor Density | N/A | |
| | | |

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| Saturated Vapor Conc. | N/A |
|----------------------------|---|
| Evaporation Rate | N/A |
| Bulk Density | N/A |
| Decomposition Temp. | N/A |
| Solvent Content | N/A |
| Water Content | N/A |
| Surface Tension | N/A |
| Conductivity | N/A |
| Miscellaneous Data | N/A |
| Solubility | N/A |
| 10 - Stability and Reactiv | ity |
| STABILITY | |
| Stable: Stable. | |
| Conditions to Avoid: Kee | p solution acidic (pH < 6). |
| Materials to Avoid: Stron | g oxidizing agents. |
| HAZARDOUS DECOMPOS | ITION PRODUCTS |
| Hazardous Decompositio | n Products: Carbon monoxide, Carbon dioxide, Nitrogen oxides, Hydrogen chloride gas. |
| HAZARDOUS POLYMERIZ | ATION |
| Hazardous Polymerizatio | n: Will not occur |
| 11 - Toxicological Informa | ation |
| RTECS NUMBER: BP5275 | 400 |
| SIGNS AND SYMPTOMS | DF EXPOSURE |
| To the best of our knowle | edge, the chemical, physical, and toxicological properties have not been thoroughly investigated. |
| ROUTE OF EXPOSURE | |
| Skin Contact: May cause | skin irritation. |
| Skin Absorption: May be | harmful if absorbed through the skin. |
| Eye Contact: May cause e | eye irritation. |
| Inhalation: Material may | be irritating to mucous membranes and upper respiratory tract. May be harmful if inhaled. Ingestion: May be harmful |
| if swallowed. | |

if swallowed.

12 - Ecological Information

No data available.

13 - Disposal Considerations

SUBSTANCE DISPOSAL

Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Observe all federal, state, and local environmental regulations.

14 - Transport Information

RID/ADR

Non-hazardous for road transport.



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IMDG

Non-hazardous for sea transport.

IATA

Non-hazardous for air transport.

15 - Regulatory Information

Not hazardous according to Directive 67/548/EEC.

16 - Other Information

WARRANTY

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. DONGYING ZEAO CHEMICAL CO.,LTD shall not be held liable for any damage resulting from handling or from contact with the above product.