

I Identification

Product Name: **Choline Chloride**

Catalog Number: **C013**

Synonyms: **(2-Hydroxyethyl) trimethylammonium chloride; Choline chlorhydrate; Choline hydrochloride; 2-Hydroxy-N,N,N-trimethylethanaminium chloride**

Company: **Caisson Laboratories**

Address: **836 South 100 East, Smithfield, UT 84335**

Telephone: **435.755.7615**

Fax: **435.755.7617**

Emergency Contact: **CHEMTREC 800.424.9300 (703.527.3887)**

Recommended Use: **For research and laboratory use only.**

Restrictions On Use: **This product is intended for research and laboratory use only. Products are not to be used as human or animal therapeutics, cosmetics, agricultural or pesticidal products, food additives, or as household chemicals.**

II Hazard(s) Identification

Overview:

Flammability:

Reactivity: **No data available**

Toxicity:

NFPA Rating

Health: **2**

Flammability: **0**

Reactivity: **0**

Special:

Pictograms:

III Composition / Information on Ingredients

General Information:

Component:

CAS#: **67-48-1**

% by Weight:

IV First-Aid Measures

General Information: **Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.**

Route of Exposure

Oral: **If swallowed, wash out mouth with water. Never give anything by mouth to an unconscious person. Get medical attention.**

Inhalation: **Safely remove victim to fresh air. If not breathing, institute cardiopulmonary resuscitation (CPR). If breathing is difficult, ensure clear airway and give oxygen. Get medical attention.**

Dermal: **Wash area thoroughly with soap and water. Remove and wash contaminated clothing. Get medical attention if irritation persists.**

Eye: **Flush immediately with large amounts of water for at least 15 minutes. Eyelids should be held away from the eyeball to ensure thorough rinsing. Get medical attention if irritation persists.**

V Fire-Fighting Measures

General Information:

Flammable Properties

General:

Flash Point: **No data available**

Ignition Temperature: **355 °C (671 °F)**

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 and protective clothing to prevent contact with skin and clothing.**

Additional Information: **No data available**

VI Accidental Release Measures

General Information:

VII Handling and Storage

Handling: **Avoid formation of dust and aerosols. Further processing of solid materials may result in the formation of combustible dusts. The potential for combustible dust formation should be taken into consideration before additional processing occurs. Provide appropriate exhaust ventilation at places where dust is formed. For precautions see section 2.2.**

Storage: **Keep in a tightly closed container, stored in a cool, dry, ventilated area. Protect from moisture. Product is hygroscopic. Store under inert gas.**

VIII Exposure Controls / Personal Protection

General Information:

Engineering Measures: **Handle in accordance to general industrial hygiene and safety practice.**

Personal Protective Equipment

General:

Eye Protection: **Wear chemical safety glasses or goggles. Have eye-washing facilities readily available where eye contact can occur.**

Hand Protection: **Wear protective gloves.**

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).**

Skin and Body Protection: **Wear lab coat, gown, or coveralls to protect from exposure.**

Hygiene Measures:

IX Physical and Chemical Properties

General Information:

Appearance: **White Powder**

pH: **No data available**

Specific Gravity: **No data available**

Melting Point: **302 - 305 °C (576 - 581 °F)**

Boiling Point: **No data available**

Flash Point: **No data available**

Flammability Range: **No data available**

Vapor Pressure: **No data available**

X Stability and Reactivity

General Information:

Storage Stability

Temperature: **Room Temperature**

Light Sensitive: **True**

Incompatibles: **Strong oxidizing agents, Strong acids, Strong bases**

Hazardous Decomposition Products: **Carbon oxides, Nitrogen oxides (NOx), Hydrogen chloride gas, Chlorine**

XI Toxicological Information

General Information:

Acute Toxicity: **LD₅₀, Oral - Rat: 3,400 mg/kg**

LD₅₀, IP - Rat: 450 mg/kg

LD₅₀, IV - Mouse: 53 mg/kg

Chronic Toxicity:

Local Effects:

Target Organs: **Eyes, skin**

Carcinogenicity: **No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.**

OSHA Permissible Exposure Limits: **No data available**

XII Ecological Information

General Information:

XIII Disposal Considerations

General Information:

Disposal of Product: **Dispose in accordance with all applicable federal, state, and local environmental regulations.**

Disposal of Packaging: **v**

XIV Transport Information

Proper Shipping Name: **CHEMICALS, N.O.S (NON-REGULATED)**

UN#: **N/A**

Class: **N/A**

Packaging Group: **N/A**

Hazard Label: **N/A**

XV Regulatory Information

General Information:

TSCA:

SARA 313:

XVI Other Information

General Information: **All chemicals may pose unknown hazards and should be used with caution. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this SDS is based on technical data judged to be reliable, Caisson Laboratories, Inc. assumes no responsibility for the completeness or accuracy of the information contained herein.**