

# Carboxymethyl chitosan: sc-358091



*The Power to Question*

## MATERIAL SAFETY DATA SHEET

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### I. Product and Company Identification

**Product Name:** Carboxymethyl chitosan  
**Catalog number:** sc-358091  
**CAS Number:** 83512-85-0  
**Supplier:** Santa Cruz Biotechnology, Inc.  
2145 Delaware Avenue  
Santa Cruz, CA 95060  
800.457.3801 or 831.457.3800

**Emergency:** ChemWatch  
Within the US & Canada: 877-715-9305  
Outside the US & Canada: +800 2436 2255 (1-800-CHEMCALL) or call +613 9573 3112

### II. Composition, Information on Ingredients

**Chemical name:** Carboxymethyl chitosan  
**CAS #:** [83512-85-0]  
**Purity:** 90%

### III. Hazards Identification

**Eye:** May cause eye irritation  
**Skin:** May cause skin irritation. Harmful if absorbed through the skin  
**Ingestion:** May cause irritation of the digestive tract. May be harmful if swallowed  
**Inhalation:** May cause respiratory tract irritation  
**Systemic Exposure:** May cause headache, nausea, disorientation, weakness, and convulsions if overexposure by ingestion or skin absorption, as poisoning symptoms.  
**Acute/Chronic Health Effects:** May be fatal if absorbed through skin. Shows symptoms of poisoning when swallowed. Irritating to tissues of the mucous membranes and upper respiratory tract, eyes, and skins.

### IV. First Aid Measures

**Eyes:** In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical aid immediately.

**Skin:** In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid immediately. Wash clothing before reuse.

**Ingestion:** If swallowed, do NOT induce vomiting. Get medical aid immediately. If victim is fully conscious, give a cupful of water. Never give anything by mouth to an unconscious person.

**Inhalation:** If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

**Notes to Physician:** Treat symptomatically and supportively.

### V. Fire Fighting Measures

**General Information:** As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

**Flammability:** May be combustible at high temperature.

**Extinguishing Media:** Use water spray, dry chemical, carbon dioxide, or chemical foam.

## VI. Accidental Release Measures

**General Information:** Use proper personal protective equipment as indicated in Section 8.

**Spills/Leaks:** Vacuum or sweep up material and place into a suitable disposal container. Clean up spills immediately, observing precautions in the Protective Equipment section. Avoid generating dusty conditions. Provide ventilation.

## VII. Handling and Storage

**Handling:** Wash thoroughly after handling. Keep away from heat. Minimize dust generation and accumulation. Do not get in eyes, on skin, or on clothing. Keep container tightly closed. Do not ingest or inhale. Discard contaminated shoes. Use only with adequate ventilation.

**Storage:** Keep container closed when not in use. Store at 4° C. Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances.

## VIII. Exposure Controls, Personal Protection

**Engineering Controls:** Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.

### Personal Protection

**Eyes:** Wear chemical splash goggles.

**Skin:** Wear appropriate protective gloves to prevent skin exposure.

**Clothing:** Wear appropriate protective clothing to prevent skin exposure. Wear lab coat and boots.

**Respirators:** Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced. Suggested protective clothing might not be sufficient. Consult a specialist BEFORE handling this product.

## IX. Physical and Chemical Properties

**Physical State:** White to almost white crystalline powder

**Molecular Formula:** Not available

**Molecular Weight:** Not available

**Melting Point:** Not available

## X. Stability and Reactivity

**Chemical Stability:** Stable under normal temperatures and pressures.

**Conditions to Avoid:** Dust generation

**Incompatibilities with Other Materials:** Strong oxidizing agents, strong acids.

**Hazardous Decomposition Products:** Nitrogen oxides, carbon monoxide, carbon dioxide, cyanides

**Hazardous Polymerization:** Will not occur.

## XI. Toxicology Information

RTECS#: Not available.

LD50/LC50: Not available.

Routes of Exposure: Eye Contact. Ingestion. Inhalation.

Carcinogenicity: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

Epidemiology: Not available

Teratogenicity: Not available.

Reproductive Effects: Not available.

Mutagenicity: Not available.

Neurotoxicity: Not available.

Other Studies: See actual entry in RTECS for complete information.

Acute toxic effects: Inflammation of the eye is characterized by redness, watering, and itching. Skin inflammation is characterized by itching, scaling, reddening, or, occasionally, blistering.

*Follow safe industrial hygiene practice and always wear proper protective equipment when handling this compound.*

## **XII. Ecological Information**

Ecotoxicity: Not available.

Environmental Fate: Not available.

## **XIII. Disposal Conditions**

Waste Disposal. Recycle to process, if possible. Consult your local regional authorities. You may be able to dissolve or mix material with a combustible solvent and burn in a chemical incinerator equipped with an after-burner and scrubber system. Observe all federal, state and local regulations when disposing of the substance. Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

RCRA P-Series: None listed.

RCRA U-Series: None listed.

## **XIV. Transport Information**

Dot Classification: Not a DOT controlled material (United States)

Proper Shipping Name: Not applicable.

UN #: Not applicable.

Packing Group (PG): Not applicable.

Hazard Classification: Not applicable.

## **XV. Regulatory Information**

TSCA Chemical Inventory: This product is NOT on the EPA Toxic Substance Control Act (TSCA) inventory. The product is supplied solely for use in research and development by or under the supervision of a technically qualified individual as defined in 40 CFR 720 et sec. The health risks have not been fully determined. Any information that is or becomes available will be supplied on an MSDS sheet.

WHMIS Classification: Not available.

EINECS # (EEC): Not available.

EEC Risk statements: R36/37/38 Irritating to eyes/respiratory system/ skin.

Safety statements: S24/25 Avoid contact with skin/ eyes.

Hazard Symbols: None.

## **XVI. Other information**

***The above information is believed to be correct but does not purport to be complete and should be used only as a guide. The burden of safe use of this material rests entirely with the user.***

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