

# Material Safety Data Sheet

## Section 1

**Contact Name & Address:**

American Polymer Standards Corporation,  
8680 Tyler Blvd., Mentor, OH 44060

**Product Name:** Chitosan

**CAS #:** 9012-76-4

**HMIS RATING:**

**Health: 0**

**Fire: 0**

**Reactivity: 0**

**Personal Protection: B**

**Emergency Telephone No. :**

(440) 255-2211

**Synonyms:** Poly(D-glucosamine), Deacetylated chitin,  
Chitosan from crab shells

**Formula:** C<sub>12</sub>H<sub>24</sub>N<sub>2</sub>O<sub>9</sub>

## Section 2 (Physical Data)

**Physical Appearance:** Yellow Powder

**Boiling Point:** Not Available

**Critical Temperature:** Not Available

**Vapor Pressure:** Not Available

**Volatility:** Not Available

**Odor:** Slight

**Melting Point:** Not Available

**Specific Gravity:** Not Available

**Vapor Density:** Not Available

**Solubility:** Not Available

## Section 3 (Fire & Explosion Hazards Data)

**Flammability of Product:** Not Available

**Flash Points:** Not Available

**Products of Combustion:** Nitrogen Compounds

**Fire & Explosion Hazards in Presence of Various Substances:** Not Available

**Fire Fighting Media and Instructions:** Use DRY Chemical Powder, Use water spray, fog or foam. Do Not Use Water Jet! Firefighters must wear SCBA & Full Protective Clothing.

**Special Remarks on Fire & Explosion Hazards:** Not Available

**Auto-Ignition Temp.:** Not Available

**Flammable Limits:** Not Available

## Section 4 (First Aid Measures)

**Eye Contact:** Check for & remove contact lenses. Immediately flush eyes with running water for a least 15 min., keeping eyelids open. Seek medical attention.

**Skin Contact:** After contact with skin, wash immediately with plenty of water. Seek medical attention is irritation develops.

**Inhalation:** Allow the victim to rest in a well ventilated area. If not breathing give artificial respiration. If breathing is difficult give oxygen. Seek immediate medical attention.

**Ingestion:** If swallowed wash out mouth with water provided person is conscious. Seek immediate medical attention.

## Section 5 (Toxicology Information)

**Route of Exposure: Skin:** May cause skin irritation, May be harmful if absorbed through the skin. **Eyes:** May cause eye irritation. May cause allergic skin reaction. **Inhalation:** May be irritating to mucous membranes and upper respiratory tract. May be harmful if inhaled. **Ingestion:** May be harmful if swallowed.

**Toxicity Data:** To the best of our knowledge the chemical, physical & toxicological properties have not been thoroughly investigated.

**Toxic to Animals:** Oral: (LD50): 10000 mg/kg (Rat)

**Chronic Effects on Humans:** Not Available

**Other Toxic Effects on Humans:** Not Available

### **Section 6 (Stability & Reactivity Data)**

**Stability:** Product is Stable at typical use temperatures      **Instability Temp.:** Not Available

**Conditions of Instability:** None Known      **Polymerization:** Will not Occur

**Hazardous Decomposition of products formed under fire conditions:** Not Available

**Incompatibility with various substances:** None Known

### **Section 7 (Accidental Release Measures)**

**Spill:** Use appropriate tools to clean spill. Store spilled material in a suitable container for disposal.

**Disposal:** Consult and follow local and regional authority requirements

### **Section 8 (Special Protection Information)**

**Personal Protection:** Splash goggles, Lab coat, Gloves and Dust respirator. Be sure to use an approved/certified respirator or equivalent.

**Exposure Limits:** Not Available (AVOID BRATHING DUST)

**Other Protective Equipment:** Rubber Boots, Safety Shower and Eye Bath after clean up.

**Other Precautions:** Use protective clothing, gloves, safety goggles and mask. Wash thoroughly after handling.

### **Section 9 (Storage & Handling)**

**Handling:** Use good housekeeping procedures. Normal measures for preventive fire protection.

**Storage:** Keep container dry and tightly closed. Keep in a cool place that is well- ventilated.

### **Section 10 (Transport & Regulatory Information)**

#### **DOT**

**Proper Shipping Name:** None

**Non-Hazardous for Transport:** This substance is considered non-hazardous for transport.

**Non-Hazardous for Air Transport:** This substance is considered non-hazardous for air transport

#### **USA Regulatory Information**

**SARA Listed:** No

**TSCA Inventory Listed:** On the TSCA Inventory or exempt for TSCA Inventory requirements

#### **Canada Regulatory Information**

**WHMIS Classification:** This product has been classified in accordance with the hazards criteria of the CPR, and the MSDS contains all the information required by the CPR.

**DSL:** Yes

**NDSL:**

**DISCLAIMER: For R&D use only. Not for use in Food, Drugs or Cosmetics. The information contained in this MSDS is the most accurate and complete information available to us. APSC expresses or implies no warranty to the information provided and assumes no liability. The material covered in this MSDS is only provided in 1 gram quantities and is not expected to pose any health or environmental risks based on these quantities.**

**Last Updated: 6/30/2008**