

## CHITOSAN

### SECTION 1: PRODUCT IDENTIFICATION

**Product Name:** CHITOSAN

**Product Code:** 4224

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

**Chemical Formula:** (C<sub>6</sub>H<sub>11</sub>NO<sub>4</sub>)<sub>n</sub>

**Formula Weight:** 309.54

**Chemical Formula:** KCl

### SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

**Composition:**

**Name:** CHITOSAN

**Toxicological Data on Ingredients:**

**Classification according to regulation (EC) No. 1272/2008**

Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

Skin irritation (Category 2), H315

Eye irritation (Category 2), H31

### SECTION 3: HAZARDS IDENTIFICATION

**Potential Acute Health Effects:** Slightly hazardous in case of skin contact (irritant), of eye contact (irritant), of ingestion, of inhalation.

**Potential Chronic Health Effects:** Slightly hazardous in case of skin contact (irritant), of eye contact (irritant), of ingestion, of inhalation.

**Carcinogenic effects:** Not available.

**Mutagenic effects:** Not available

**Teratogenic effects:** Not available.

**Developmental toxicity:** Not available.

### SECTION 4: FIRST AID MEASURES

**Eye Contact:** Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention.

**Skin Contact:** Wash off immediately with soap and plenty of water. Cover the irritated skin with emollient. Immediate medical attention is required.

**Serious Skin Contact:** Not available

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

**Serious Inhalation:** Not Available

**Ingestion:** Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention if symptoms appear.

**Serious Ingestion:** Not available

### SECTION 5: FIRE FIGHTING MEASURES

**Flammability of the Product:** Not Applicable

**Auto-Ignition Temperature:** Not Applicable



**Flash Points:** Not Applicable  
**Flammable Limits:** Not Applicable  
**Products of Combustion:** Not Applicable  
**Special Remarks on Fire Hazards:** Not Applicable  
**Special Remarks on Explosion Hazards:** Not Available

### SECTION 6: ACCIDENTAL RELEASE MEASURES

**Small Spill:** Use appropriate tools to put the spilled solid in a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.  
**Large Spill:** Use a shovel to put the material into a convenient waste disposal container. Finish cleaning by spreading water on the Contaminated surface and allow evacuating through the sanitary system.

### SECTION 7: HANDLING AND STORAGE

**Precautions:** Keep away from heat. Keep away from sources of ignition.  
**Storage:** Store in cool, dry place in closed containers.

### SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

**Engineering Controls:** Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

**Personal Protection:**

**Eye/face protection :** Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**Skin protection:** The selected protective gloves have to satisfy the specifications of Regulation (EU) 2016/425 and the standard EN 374 derived from it

**Respiratory protection:** Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). Safety glasses, Lab coat, Dust respirator, Gloves. Be sure to use an approved/certified respirator or equivalent.

**Personal Protection in Case of a Large Spill:** Splash goggles, Full suit, Dust respirator, Boots, Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

**Exposure Limits:** Not Available.

### SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical state and appearance Form</b>	: Off White to Beige and Faint Brown toLight Brown.
<b>Odour</b>	: Not available
<b>Taste</b>	: Not available
<b>Molecular Weight</b>	: Not available
<b>Colour</b>	: Not available
<b>pH</b>	: Not available
<b>Boiling Point</b>	: Not available
<b>Melting Point</b>	: 168 °C(334.4°F)
<b>Critical Temperature</b>	: Not available
<b>Specific Density</b>	: Not Available
<b>Vapor Pressure</b>	: Not Available
<b>Vapor Density</b>	: Not available
<b>Volatility</b>	: Not Available
<b>Odor Threshold</b>	: Not Available

Water/Oil Dist. Coeff.	: Not Available
Ionicity (in Water)	: Not Available
Dispersion Properties	: Not Available
Solubility	: Not available

#### SECTION 10: STABILITY AND REACTIVITY DATA

**Stability:** Not available.  
**Instability Temperature:** Not available.  
**Conditions of Instability:** Not available.  
**Incompatibility with various substances:** Strong oxidizing agents  
**Corrosivity:** Non corrosive in presence of glass.  
**Special Remarks on Reactivity:** Not available.  
**Special Remarks on Corrosivity:** Not available.  
**Polymerization:** Not Occur

#### SECTION 11: TOXICOLOGICAL INFORMATION

**Routes of Entry:** Not Available.  
**Toxicity to Animals:**  
**LD<sub>50</sub>:** Not Available.  
**LC<sub>50</sub>:** Not Available.  
**Chronic Effects on Humans:** Not Available.  
**Other Toxic Effects on Humans:** Slightly hazardous in case of ingestion, of inhalation.  
**Special Remarks on Toxicity to Animals:** Not Available.  
**Special Remarks on Chronic Effects on Humans:** Not Available.  
**Special Remarks on other Toxic Effects on Humans:** Not Available.

#### SECTION 12: ECOLOGICAL INFORMATION

**Ecotoxicity:** Not available.  
**BOD and COD:** Not Available.  
**Products of Biodegradation:** Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.  
**Toxicity of the Products of Biodegradation:** The products of degradation are not toxic.  
**Special Remarks on the Products of Biodegradation:** Not Available

#### SECTION 13: DISPOSAL CONSIDERATIONS

**Waste Disposal:** Waste must be disposed of in accordance with federal, state and local environmental control regulations.

#### SECTION 14: TRANSPORT INFORMATION

**DOT Classification:** Not a DOT controlled material (United States)  
**Identification:** Not applicable  
**Special Provisions for Transport:** Not applicable

#### SECTION 15: OTHER REGULATORY INFORMATION

**Safety, health and environmental regulations/legislation specific for the substance or mixture**



This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

#### **SECTION 16: OTHER INFORMATION**

**References: Full text of H AND R-Statements.**

H315 Causes skin irritation.

H319 Causes serious eye irritation.

**Other Special Considerations:** Not available.

The information contained in this data sheet represents the best information currently available to us. However, no warranty is made with respect to its completeness and we assume no liability resulting from its use. The information is offered solely for user's obligation to investigate and determine the suitability of the information for their particular purpose.