# **MSDS for CHITOSAN POWDER**

#### \*\*\*\* SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION \*\*\*\*

MSDS Name: CHITOSAN POWDER
Origin: Crab or Shrimp Shell

Catalog Numbers:

39139000

Synonyms: Chitosan

Company Identification:

GREENTECH BIOCHEMICALS CO., LIMITED

For any information and requirement, please call or send the E-mail to the followings:

Tel: +0532-85823286/85823330 E-mail: <u>lily@greentech-bio.com.cn</u>

Contacting Person: Lily

\*\*\*\* SECTION 2 - COMPOSITION, INFORMATION ON INGREDIENTS \*\*\*\*

CAS NO.: 9012-76-4

\*\*\*\* SECTION 3 - HAZARDS IDENTIFICATION \*\*\*\*

**EMERGENCY OVERVIEW** 

Harmful if swallowed.

Potential Health Effects

The toxicological properties of this material have not been investigated. Use appropriate procedures to prevent opportunities for direct contact with the skin or eyes and to prevent inhalation.

\*\*\*\* SECTION 4 - FIRST AID MEASURES \*\*\*\*

Eyes:

Immediately flush eyes with plenty of water for at least 5 minutes, occasionally lifting the upper and lower eyelids.

Skin:

No damage. Flush skin with plenty of soap and water for at least 1 minute.

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#### Ingestion:

No damage. Do NOT induce vomiting. If conscious and alert, rinse mouth and drink 2-4 cupfuls of milk or water.

#### Inhalation:

No damage.

#### \*\*\*\* SECTION 5 - 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.

#### **Extinguishing Media:**

In case of fire, use water, dry chemical, chemical foam, or alcohol-resistant foam.

#### \*\*\*\* SECTION 6 - ACCIDENTAL RELEASE MEASURES \*\*\*\*

#### General Information:

Use proper personal protective equipment as indicated in Section 8.

## Spills/Leaks:

Clean up spills immediately, observing precautions in the Protective Equipment section. Sweep up, then place into a suitable container for disposal.

#### \*\*\*\* SECTION 7 - HANDLING and STORAGE \*\*\*\*

#### Handling:

Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Avoid contact with eyes, skin, and clothing. Avoid ingestion and inhalation.

#### Storage:

Store in a cool, dry place. Keep container closed when not in use.

#### \*\*\*\* SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION \*\*\*\*

#### **Engineering Controls:**

Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits. Use process enclosure, local exhaust ventilation, or other engineering controls to control airborne levels.

## Personal Protective Equipment

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Eves:

Wear safety glasses and chemical goggles if splashing is possible.

Skin:

Wear appropriate protective gloves and clothing to prevent skin exposure.

Clothing:

Wear appropriate protective clothing to minimize contact with skin.

Respirators:

Wear a NIOSH/MSHA or European Standard EN 149 approved full face piece airline respirator in the positive pressure mode with emergency escape provisions.

#### \*\*\*\* SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES \*\*\*\*

Appearance: Off-white powder

Assay: 90% Min

Loss on Drying: 10% Max Heavy Metals: 10 ppm Max

Melting point: 192°C Boiling point: 135°C Flash point: 59°C Burning point: 238°C

# \*\*\*\* SECTION 10 - STABILITY AND REACTIVITY \*\*\*\*

**Chemical Stability:** 

Stable under normal temperatures and pressures.

Conditions to Avoid:

Incompatible materials, strong oxidants.

Incompatibilities with Other Materials:

Strong oxidizing agents, strong reducing agents, strong bases.

Hazardous Decomposition Products:

Carbon monoxide, irritating and toxic fumes and gases, carbon dioxide.

Hazardous Polymerization:

Has not been reported.

## \*\*\*\* SECTION 11 - TOXICOLOGICAL INFORMATION \*\*\*\*

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No toxicological report.

\*\*\*\* SECTION 12 - ECOLOGICAL INFORMATION \*\*\*\*

No data available

#### \*\*\*\* SECTION 13 - DISPOSAL CONSIDERATIONS \*\*\*\*

Appropriate method of disposal of substance or prepareation

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 loval environmental regulations.

#### \*\*\*\* SECTION 14 - TRANSPORT INFORMATION \*\*\*\*

IATA

Not regulated as a hazardous material.

IMO

Not regulated as a hazardous material.

RID/ADR

Not regulated as a hazardous material.

# \*\*\*\* SECTION 15 - REGULATORY INFORMATION \*\*\*\*

**EU ADDITIONAL CLASSIFICATION** 

Symbol of Danger: Xi

Indication of Danger: Irritant

R: 36/37/38

Risk statement: In case of contact with eyes, rinse immediately with Olanty of water and seek

medical advice. Wear suitable protective clothing.

## \*\*\*\* SECTION 16 - OTHER INFORMATION \*\*\*\*

The above information is believed to be correct but does not purport to be all inclusive and shall be used on as a guide. We shall not be held liable for any damage resulting from handling or from contact with the above product see reverse side of invoice or packing slip for additional terms and conditions of sale.

Greentech Biochemicals Co., Limited