



## SAFETY DATA SHEET CHITOSAN

### SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

#### 1.1. Product identifier

Product name CHITOSAN  
CAS-No. 9012-76-4

#### 1.2. Relevant identified uses of the substance or mixture and uses advised against

Identified uses Cosmetic Preparations

#### 1.3. Details of the supplier of the safety data sheet

Supplier RITA Corporation  
P.O. Box 457  
Crystal Lake  
IL 60039-0457  
USA  
815 337 2500  
815 337 2522  
sds@ritacorp.com

#### 1.4. Emergency telephone number

CHEMTREC EMERGENCY HOTLINE: 800-424-9300 CHEMTREC (Outside USA/Canada) 1-703-527-3887

### SECTION 2: HAZARDS IDENTIFICATION

#### 2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical and Chemical Hazards Not classified.  
Human health Not classified.  
Environment Not classified.

Classification (67/548/EEC) Not classified.

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

#### 2.2. Label elements

Label In Accordance With (EC) No. 1272/2008

Not classified.

#### 2.3. Other hazards

### SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

#### 3.1. Substances

Product name CHITOSAN  
CAS-No. 9012-76-4

### SECTION 4: FIRST AID MEASURES

#### 4.1. Description of first aid measures

Inhalation

Move into fresh air and keep at rest.

Ingestion

Rinse mouth thoroughly.

Skin contact

Wash the skin immediately with soap and water.

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### Eye contact

Immediately rinse with water. Continue to rinse for at least 15 minutes.

### **4.2. Most important symptoms and effects, both acute and delayed**

#### General information

No specific symptoms noted.

### **4.3. Indication of any immediate medical attention and special treatment needed**

No specific first aid measures noted.

## SECTION 5: FIREFIGHTING MEASURES

### **5.1. Extinguishing media**

#### Extinguishing media

Water spray, foam, dry powder or carbon dioxide.

Unsuitable extinguishing media

None known.

### **5.2. Special hazards arising from the substance or mixture**

#### Hazardous combustion products

During fire, toxic gases (CO, CO<sub>2</sub>) are formed.

#### Unusual Fire & Explosion Hazards

No unusual fire or explosion hazards noted.

### **5.3. Advice for firefighters**

#### Special Fire Fighting Procedures

No specific fire fighting procedure given.

Protective equipment for fire-fighters

Use protective equipment appropriate for surrounding materials.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

### **6.1. Personal precautions, protective equipment and emergency procedures**

For personal protection, see section 8.

### **6.2. Environmental precautions**

The product is potentially degradable.

### **6.3. Methods and material for containment and cleaning up**

Collect powder using special dust vacuum cleaner with particle filter or carefully sweep into closed container. Avoid dust formation.

### **6.4. Reference to other sections**

For personal protection, see section 8. For waste disposal, see section 13.

## SECTION 7: HANDLING AND STORAGE

### **7.1. Precautions for safe handling**

Good personal hygiene is necessary. Wash hands and contaminated areas with water and soap before leaving the work site.

### **7.2. Conditions for safe storage, including any incompatibilities**

Store in tightly closed original container in a dry and cool place.

### **7.3. Specific end use(s)**

The identified uses for this product are detailed in Section 1.2.

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### **8.1. Control parameters**

#### Ingredient Comments

No exposure limits noted for ingredient(s).

### **8.2. Exposure controls**

Protective equipment

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### Engineering measures

All handling to take place in well-ventilated area.

### Respiratory equipment

Respiratory protection not required.

### Hand protection

PVC gloves are recommended.

### Eye protection

Wear approved safety goggles.

### Hygiene measures

Remove contaminated clothing and wash the skin thoroughly with soap and water after work.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

### 9.1. Information on basic physical and chemical properties

Appearance	Powder.
Colour	Light brown.
Odour	Characteristic.
Solubility	Insoluble in: Water. Alcohol
Initial boiling point and boiling range	
Not determined.	
Melting point (°C)	
Not determined.	
Relative density	
Not determined.	
pH-Value, Diluted Solution	
Not applicable.	
Flash point (°C)	
Not determined.	

### 9.2. Other information

None.

## SECTION 10: STABILITY AND REACTIVITY

### 10.1. Reactivity

No specific reactivity hazards associated with this product.

### 10.2. Chemical stability

Stable under normal temperature conditions and recommended use.

### 10.3. Possibility of hazardous reactions

Not known.

### 10.4. Conditions to avoid

Avoid exposing to heat and contact with strong oxidising substances.

### 10.5. Incompatible materials

Materials To Avoid

No incompatible groups noted.

### 10.6. Hazardous decomposition products

Carbon monoxide (CO).

## SECTION 11: TOXICOLOGICAL INFORMATION

### 11.1. Information on toxicological effects

Toxicological information

Non-hazardous substance.

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Inhalation

No specific health warnings noted.

Ingestion

No specific health warnings noted.

Skin contact

No specific health warnings noted.

Eye contact

No specific health warnings noted.

### SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity

No data on possible environmental effects have been found.

#### **12.1. Toxicity**

Acute Fish Toxicity

No data recorded.

#### **12.2. Persistence and degradability**

Degradability

The product is potentially degradable.

#### **12.3. Bioaccumulative potential**

Bioaccumulative potential

No data available on bioaccumulation.

#### **12.4. Mobility in soil**

Mobility:

No data available.

#### **12.5. Results of PBT and vPvB assessment**

No data available

#### **12.6. Other adverse effects**

None known.

### SECTION 13: DISPOSAL CONSIDERATIONS

#### **13.1. Waste treatment methods**

Dispose of waste and residues in accordance with local authority requirements.

### SECTION 14: TRANSPORT INFORMATION

General

The product is not covered by international regulation on the transport of dangerous goods (IMDG, IATA, ADR/RID).

#### **14.1. UN number**

Not applicable.

#### **14.2. UN proper shipping name**

Not applicable.

#### **14.3. Transport hazard class(es)**

Not applicable.

#### **14.4. Packing group**

Not applicable.

#### **14.5. Environmental hazards**

Environmentally Hazardous Substance/Marine Pollutant

No.

#### **14.6. Special precautions for user**

Not applicable.

#### **14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**

Not applicable.

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### SECTION 15: REGULATORY INFORMATION

#### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Environmental Listing

No listing noted.

EU Legislation

Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 with amendments. Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments.

#### 15.2. Chemical Safety Assessment

No chemical safety assessment has been carried out.

### SECTION 16: OTHER INFORMATION

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Risk Phrases In Full

NC Not classified.

Hazard Statements In Full