



DATE PREPARED: 6/24/2015

#### Section 1. Product and Company Identification

**Product Name** Chitosan 9012-76-4 **CAS Number** 

Parchem - fine & specialty chemicals

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CHEMTEL

Toll Free US & Canada: 1 (800) 255-3924

All other Origins: 1 (813) 248-0585

Collect Calls Accepted

Section 2. Hazards Identification

# Classification of the substance or mixture GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Acute aquatic toxicity (Category 2), H401 Chronic aquatic toxicity (Category 2), H411

#### **GHS Label Elements**

#### **Pictograms:**



Signal word: N/A

# Hazard and precautionary statements **Hazard Statements**

H411 Toxic to aquatic life with long lasting effects.

#### **Precautionary Statements**

P273 Avoid release to the environment.

P391 Collect spillage.

P501 Dispose of contents/ container to an approved waste disposal plant.

Hazards not otherwise classified (HNOC) or not covered by GHS: None





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#### Section 3. Composition / Information on Ingredients

Common Name Chitosan

**Synonym(s)** Poly(D-glucosamine); Deacetylated chitin

**CAS Number** 9012-76-4

Section 4. First Aid Measures

#### **Description of first-aid measures**

**General advice:** Consult a physician. Show this safety data sheet to the doctor in attendance. **Inhalation:** If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

**Skin contact:** Wash off with soap and plenty of water. Consult a physician.

**Eye contact:** Flush eyes with water as a precaution.

**Ingestion:** Never give anything by mouth to an unconscious person. Rinse mouth with water.

Consult a physician.

**Most important symptoms and effects, both acute and delayed:** The most important known symptoms and effects are described in the labelling and/or in section 11.

Indication of any immediate medical attention and special treatment needed: no data available

Section 5. Firefighting Measures

#### Extinguishing media

**Suitable extinguishing media:** Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**Special hazards arising from the substance or mixture:** Carbon oxides, nitrogen oxides (NOx)

**Advice for firefighters:** Wear self-contained breathing apparatus for firefighting if necessary.

Further information: No data available

Section 6. Accidental Release Measures

**Personal precautions, protective equipment, and emergency procedures:** Avoid dust formation. Avoid breathing vapors, mist, or gas. Ensure adequate ventilation. For personal protection see section 8.

**Environmental precautions:** Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

**Methods and materials for containment and cleaning up:** Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

**Reference to other sections:** For disposal see section 13.



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#### Section 7. Handling and Storage

**Precautions for safe handling:** Provide appropriate exhaust ventilation at places where dust is formed.

**Conditions for safe storage, including any incompatibilities:** Keep container tightly closed in a dry and well-ventilated place. Keep in a dry place.

Section 8. Exposure Controls / Personal Protection

#### **Control parameters**

**Components with workplace control parameters:** Contains no substances with occupational exposure limit values.

#### **Exposure controls**

**Appropriate engineering controls:** Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

### Personal protective equipment

**Eye/face protection:** Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**Skin protection:** Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

**Body Protection:** Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**Respiratory protection:** Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Control of environmental exposure:** Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

Section 9. Physical and Chemical Properties

# **Appearance**

Form: Powder Color: Beige

Odor: No data available

Odor Threshold: No data available

pH: No data available

Melting point/freezing point: No data available





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Initial boiling point and boiling range: No data available

Flash point: No data available

Evaporation rate: No data available

Flammability (solid, gas): No data available

Upper/lower flammability or explosive limits: No data available

Vapor pressure: No data available Vapor density: No data available Relative density: No data available Water solubility: No data available

Partition coefficient (n-Octanol/water): No data available

Auto-ignition temperature: No data available Decomposition temperature: No data available

Viscosity: No data available

**Explosive properties:** No data available **Oxidizing properties:** No data available

Other safety information: No data available

Section 10. Stability and Reactivity

Reactivity: No data available

**Chemical stability:** Stable under recommended storage conditions.

Possibility of hazardous reactions: No data available

Conditions to avoid: No data available

**Incompatible materials:** Strong oxidizing agents

Hazardous decomposition products

Other decomposition products: No data available

In the event of fire: see section 5

Section 11. Toxicological Information

#### Information on toxicological effects

**Acute Toxicity** 

LD50 Oral - rat: > 10,000 mg/kg Inhalation: No data available Dermal: No data available

Skin corrosion/irritation: No data available

Serious eye damage/eye irritation: No data available Respiratory or skin sensitization: No data available

Germ cell mutagenicity: No data available

# Safety Data Sheet



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#### Carcinogenicity

**IARC:** No component of this product, present at levels greater than or equal to 0.1%, is identified as probable, possible or confirmed human carcinogen by IARC.

**ACGIH:** No component of this product, present at levels greater than or equal to 0.1%, is identified as a carcinogen or potential carcinogen by ACGIH.

**NTP:** No component of this product, present at levels greater than or equal to 0.1%, is identified as a known or anticipated carcinogen by NTP.

**OSHA:** No component of this product, present at levels greater than or equal to 0.1%, is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity: No data available

Specific target organ toxicity - single exposure: No data available Specific target organ toxicity - repeated exposure: No data available

Aspiration hazard: No data available

#### **Additional Information**

RTECS: Not available

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

#### Section 12. Ecological Information

#### Toxicity

Toxicity to fish LC50 - Oncorhynchus mykiss (rainbow trout): 1.73 mg/l (96 h)

Toxicity to daphnia and other aquatic invertebrates EC50 - Daphnia pulex (Water flea): 13.69 mg/l

(48 h)

Persistence and degradability: No data available Bioaccumulative potential: No data available

Mobility in soil: No data available

Results of PBT and vPvB assessment: PBT/vPvB assessment not available as chemical safety

assessment not required/not conducted.

**Other adverse effects:** An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Toxic to aquatic life.

#### Section 13. Disposal Considerations

**Waste Treatment Methods:** Dispose of product and contaminated packaging in accordance with all local, state, and federal environmental control regulations.

#### Section 14. Transport Information

**DOT (US):** Not dangerous goods **IMDG:** Not dangerous goods **IATA:** Not dangerous goods





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#### Section 15. Regulatory Information

#### **SARA 302 Components**

**SARA 302:** No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

#### **SARA 313 Components**

**SARA 313:** This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 Hazards: No SARA Hazards

#### **Massachusetts Right to Know Components**

No components are subject to the Massachusetts Right to Know Act.

#### **Pennsylvania Right to Know Components**

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# **New Jersey Right to Know Components**

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**California Prop. 65 Components:** This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

#### **HMIS Rating**

Health: 0

Flammability: 0 Reactivity: 0

# **NPFA Rating**

Health: 0

Flammability: 0 Reactivity: 0

Section 16. Other Information

**Disclaimer:** The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product.

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