



Material Safety Data Sheet

CHONDROITINASE ABC

MSDS Number: SI-100330E Effective date: 12/10/2007

1. PRODUCT IDENTIFICATION

Product name: CHONDROITINASE ABC from *Proteus vulgaris* **Synonyms:** Chondroitin ABC Lyase, Chondroitin ABC Eliminase

Supplier:

SEIKAGAKU BIOBUSINESS CORPORATION 39, Kanda Higashimatsushita-cho Chiyoda-ku

Tokyo 101-0042, Japan Telephone: 81-3-3256-0056 Facsimile: 81-3-3256-8821

Emergency telephone number: 81-3-3256-0056

2. COMPOSITION / INFORMATION ON INGREDIENTS

Ingredient Name Chondroitinase ABC from *Proteus vulgaris* **CAS Number** 9024-13-9

Hazardous

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: May cause skin irritation and/or dermatitis

Principle routes of exposure: Skin

Inhalation: May cause irritation of respiratory tract

Ingestion: May be harmful if swallowed. **Skin contact:** May cause allergic skin reaction

Eye contact: Avoid contact with eyes

Statements of hazard: MAY CAUSE ALLERGIC SKIN REACTION.

For additional information on toxicity, please refer to 11. Toxicological Information.

4. FIRST AID MEASURES

General advice: In the case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

Inhalation: Remove to fresh air. Call a physician immediately.

Skin contact: Rinse immediately with plenty of water and seek medical advice.

Ingestion: Wash out mouth with water provided person is conscious. Call a physician immediately.

Eye contact: Rinse immediately with plenty of water for at least 15 minutes. Assure adequate flushing by

separating the eyelids with fingers. Call a physician.

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5. FIRE FIGHTING MEASURES

Flash Point: No data available

Extinguishing Media: Use water spray, CO₂, dry chemical powder or appropriate foam.

Fire Fighting Procedures: Fire fighters should wear protective clothing and self-contained breathing apparatus.

Unusual Fire/Explosion Hazard: Emits irritant fumes under fire conditions.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions: Wear protective equipment.

Environmental precautions: Prevent product from entering drains.

Methods for cleaning up: Sweep up and place in a bag and hold for waste disposal. Avoid raising dust. Ventilate

area and wash spill site after material pickup is complete.

7. HANDLING AND STORAGE

Storage Precautions: Store at -20°C. Keep containers closed. Store away from heat.

Handling: Use only in area provided with appropriate exhaust ventilation.

Safe handling advice: Wear personal protective equipment.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering measures: Ensure adequate ventilation.

PERSONAL PROTECTIVE EQUIPMENT

Respiratory protection: Breathing apparatus only if aerosol or dust is formed.

Hand protection: Pvc or other plastic material gloves

Skin and body protection: Usual safety precautions while handling the product will provide adequate protection

against this potential effect.

Eye protection: Safety glasses with side-shields

Hygiene measures: Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state:

Form: Powder Color: White

Formula: No data available

Molecular weight: 120,000-145,000 (Gel filtration) Melting point/range: No data available at this time. Boiling point/range: No data available at this time.

Density: No data available

Vapor pressure: No data available Evaporation rate: No data available Vapor density: No data available Solubility (in water): Soluble Flash point: No data available

Autoignition temperature: No data available

10. STABILITY AND REACTIVITY

Stability: Stable under recommended storage conditions.

Polymerization: None under normal processing.

Hazardous decomposition products: Thermal decomposition can lead to release of irritating gases and vapours

such as carbon oxides.

Materials to avoid: Strong oxidising agents

Conditions to avoid: Exposure to air or moisture over prolonged periods.

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11. TOXICOLOGICAL INFORMATION

Route of Exposure:

Multiple Routes: May cause irritation. May be harmful by inhalation, ingestion, or skin absorption.

Sensitization: Prolonged or repeated exposure may cause allergic reactions in certain sensitive individuals.

Conditions Aggravated by Exposure: The toxicological properties have not been thoroughly investigated.

12. ECOLOGICAL INFORMATION

Mobility: No data available

Bioaccumulation: No data available **Ecotoxicity effects:** No data available **Aquatic toxicity:** No data available

13. DISPOSAL CONSIDERATIONS

Waste from residues / unused products: Waste disposal must be in accordance with appropriate Federal, State, and local regulations. This product, if unaltered by use, may be disposed of by treatment at a permitted facility or as advised by your local hazardous waste regulatory authority. Residue from fires extinguished with this material may be hazardous.

14. TRANSPORT INFORMATION

UN/Id No: Not regulated

DOT:

Proper shipping name: Not regulated

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

IATA:

Non-Hazardous for Air Transport: Non-hazardous for air transport.

15. REGULATORY INFORMATION

International Inventories

Inventory - United States TSCA - Sect. 8(b) : Not Listed Canada DSL Inventory List : Not Listed Inventory - Japan : Not Listed EU EINECS List : 232-777-9

16. OTHER INFORMATION

Disclaimer: For laboratory use only. Not for drug, household or other uses.

The above information is believed to be correct but does not purport to be all inclusive and is intended to be used only as a guide. SEIKAGAKU BIOBUSINESS CORPORATION will not be held responsible for any damage from handling or from contact with the above product.

End of MSDS