



SECTION 4: CRITICAL HAZARDS

Emergency overview: The product contains no substances which at their given concentration are considered to be hazardous to health.

Properties affecting health: None

Principle routes of exposure:

Oral: No hazard. Chymotrypsin will be inactivated and destroyed by stomach acids.

Eye contact: Will digest proteins in the eye.

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SECTION 4: CRITICAL HAZARDS (continued)

Skin contact: Highly irritant and extended exposure will result in digestion of skin.

Ingestion: Unknown on product.

Inhalation: Highly irritant and extended exposure will result in degradation of lung tissue.

Physical-chemical properties: No hazards resulting from material as supplied.

Hazard information: Unknown on product.

Target organs effects: Unknown on product.

Reproductive effects: Unknown on product.

Mutagenic effects: Unknown on product.

Carcinogenicity rating:

OSHA: Unknown on product.

NTP: Unknown on product.

IARC: Unknown on product.

ACGIH: Unknown on product.

Signs and symptoms: None.

Medical conditions aggravated by exposure: None known.

SECTION 5: EMERGENCY FIRST AID PROCEDURES

Call a physician and arrange for transport to nearest ER (Emergency Room) if unique symptoms occur.

Inhalation: Drink water to flush enzyme from mucous membranes and seek medical aid.
Ingestion: If the product is ingested, rinse mouth with water and drink sufficient water to flush



passage.
Skin Contact: Skin contact from this product should not cause a problem. Wash any inadvertent contact with skin with warm water and soap. If the product should cause skin irritation or sensitization, contact a physician immediately.
Eye Contact: Eye contact should not be a problem, but immediately flush eyes with copious amounts of water and seek medical advice.

SECTION 6: FIRE AND EXPLOSION HAZARD DATA

Flash point (°C): Unknown on product.
Auto ignition temperature: Unknown on product.
Flammable limits in air – lower(%): Unknown on product.
Flammable limits in air – upper(%): Unknown on product.

SECTION 6: FIRE AND EXPLOSION HAZARD DATA (continued)

NFPA rating: Health 0, Flammability 0, Reactivity 0
HMIS classification: Health 0, Flammability 0, Reactivity 0

Fire fighting information:
Suitable extinguishing media: Use any media, which is suitable for the surrounding fire.

Extinguishing media which must not be used for safety reasons: None.

Special protective equipment for firefighters: Wear self-contained breathing apparatus for fire fighting if necessary.

Specific methods: None.
Hazardous combustion products: None.
Explosive in Nature: None.
Explosion limits:
 LEL(lower): None.
 UEL (upper): None.

SECTION 7: ACCIDENTAL SPILL OR RELEASE MEASURES

Personal precautions: Ensure adequate ventilation.
Environmental precautions: No special environmental precautions required.
Methods for cleaning up: Proceed to vacuum material using a highly retentive filters (HEPA) or other means as to minimize the creation of aerosols. Collect material and place in a container for sanitizing and disposal. Sanitize area with bleach and discard collected material in accordance with local, state, and federal regulations or according to your procedure for disposal of animal proteins.

SECTION 8: HANDLING AND STORAGE



Handling:
Technical measures/precautions: Local exhaust.
Safe handling advice: While no special precautions are necessary, it is recommended to employ universal handling procedures.

Storage:
Technical measures/storage conditions: Store at temperatures and conditions per labeled instructions.
Incompatible products: Moisture and heat.

SECTION 9: PERSONAL PROTECTION

Engineering controls: Ensure adequate ventilation.
Respiratory protection: No personal respiratory protective equipment normally required. However, recommended where there is a potential for aerosol creation and for product protection.

Eye protection: Eye protection with side shields required; face shields required when splash protection from operations may occur.

Hand protection: Either latex, rubber or nitrile gloves are recommended for personal and product protection.

Skin protection: General good laboratory practices and universal precautions required under normal handling conditions. Wash any exposed areas of hands/skin upon contact.

Other/general protection: General good laboratory practices and universal handling procedures are recommended.

SECTION 10: REACTIVITY DATA

Chemical stability: Stable under recommended storage conditions.
Hazard polymerization: Will not occur.
Hazardous decomposition products: May produce ammonia when dissolved in alkaline solution.
Materials to avoid: Unknown on product.
Conditions to avoid: Avoid moist storage conditions and keep dry below 4°C.

SECTION 11: TOXICOLOGICAL INFORMATION

Acute toxicity:
Oral: Unknown on product.
Eye irritation: Unknown on product. May cause eye irritation.
Dermal irritation: Unknown on product.
Inhalation: Unknown on product.

Chronic toxicity:
Oral: Unknown on product.



Dermal:	Unknown on product.
Inhalation:	Unknown on product.
Corrosivity:	Unknown on product.
Sensitization:	Unknown on product.
Target organs effects:	Unknown on product.
Carcinogenic effects:	Unknown on product.
Mutagenic effects:	Unknown on product.
Reproductive effects:	Unknown on product.
Developmental effects:	Unknown on product.
General notes:	See Below.

SECTION 11: TOXICOLOGICAL INFORMATION (continued)

Inhalation:	Inhalation of fumes from this product should not cause a problem.
Ingestion:	Ingestion of this product should not cause a problem. If the product is ingested, seek advice of physician.
Skin Contact:	Skin contact from this product should not cause a problem. Wash any inadvertent contact with skin with warm water and soap. If the product should cause skin irritation or sensitization, contact a physician immediately.
Eye Contact:	Eye contact should not be a problem, but immediately flush eyes with copious amounts of water and seek medical advice.
Threshold Limit Value of Product/Mixture:	Not determined.
Carcinogen or Suspected Carcinogen:	Not listed by NTP, ARC, or regulated as a carcinogen by OSHA in 29 CFR 1910

SECTION 12: ECOLOGICAL INFORMATION

Mobility:	Unknown on product.
Bioaccumulation:	Unknown on product.
Degradation:	Unknown on product.
Eco-toxicity effects:	This product has no known eco-toxicological effects.
Aquatic toxicity effects:	Unknown on product.
General notes:	Ecological effects of the product are comparable to any other animal derived material.

SECTION 13: DISPOSAL

Waste from residues / unused products:	Waste disposal must be in accordance with appropriate Federal, State, Local and International regulations. Decontaminate or sanitize using approved procedures for animal waste and dispose of in accordance with local, state, and federal regulations for non-
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hazardous materials or in accordance with your approved procedures. 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.

Contaminated packaging: None

SECTION 14: TRANSPORTATION (IATA Regulations)

DOT:

DOT UN-No:	No data is available on the product itself.
DOT shipping name:	Not regulated.
Hazard class:	No data is available on the product itself.
Subsidiary risk (hazard class):	No data is available on the product itself.
Packing group:	No data is available on the product itself.
DOT reportable quantity (lbs):	No data is available on the product itself.

IMO/IMDG:

Hazard class:	No data is available on the product itself.
IMDG page:	No data is available on the product itself.
IMO-labels:	No data is available on the product itself.
Packing group:	No data is available on the product itself.
EMS No:	No data is available on the product itself.
MFAG table No.:	No data is available on the product itself.
Proper shipping name:	Not regulated.
UN/Id No.:	No data is available on the product itself.
TREM-card:	No data is available on the product itself.

ADR/RID:

Hazard class/item No. letter:	No data is available on the product itself.
Item:	No data is available on the product itself.
ADR/RID-labels:	No data is available on the product itself.
ADR/RID UN/Id No.:	No data is available on the product itself.
Proper shipping name:	Not regulated.

IATA/ICAO:

Hazard class:	No data is available on the product itself.
Packing group:	No data is available on the product itself.
Proper shipping name:	Not regulated.

TDG (Canada):

Status:	No data is available on the product itself.
Packing group:	No data is available on the product itself.

Proper Shipping Name: Not regulated under WHMIS.
Technical Name: N/A



Product No: 7008
Alpha Chymotrypsin
MATERIAL SAFETY DATA SHEET

UN Number: N/A
Hazard Class and Packaging Group: N/A
Label(s): N/A
Pass: Not regulated material.
Cargo: Not regulated material.

SECTION 15: OTHER REGULATORY INFORMATION

EPRCA (SARA title III) section 313 toxic chemical data – de-minimis concentration: This product complies with toxdem:
EPCRA (SARA title III) section 302 extremely hazardous substance data – threshold planning quantity: This product complies with ehslst:

SARA (311, 312) hazard class:
Immediate health: None.
Delayed health: None.
Fire: None.
Sudden pressure: None.
Reactivity: None.

TSCA inventory list: This product complies with TSCA:
CERCLA reportable quantity (lbs): N/A
CERCLA/SARA status: N/A
RCRA status: N/A
EPA FIFRA classification: N/A
Proposition 65 listed material: N/A

WHMIS: Not regulated under WHMIS.
WHMIS trade secret: None.
WHMIS hazard class: None.

Canada DSL inventory list: This product complies with DSL.

Notes:

1. SARA = Superfund Amendments and the Reauthorization Act.
2. CERCLA = Comprehensive Environmental Response, Compensations and Liability Act.
3. FIFRA = Federal Insecticide, Fungicide and Rodenticide Act
4. TSCA = Toxic Substance Control Act
5. WHMIS = Canadian Workplace Hazardous Materials Information System
6. This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contain all of the information required by the CPR.



Product No: 7008
Alpha Chymotrypsin
MATERIAL SAFETY DATA SHEET

SECTION 16: OTHER INFORMATION

This data sheet contains changes from the previous version in section(s): None.

Additional advice: For protection of product integrity, the use of gloves, safety glasses with side shields and an applicable dust mask are recommended when handling very large quantities.

References: None.

MSDS format: North American - U.S. and Canada

This MSDS was prepared in accordance with OSHA 29 CFR 1910.1200.

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End of safety data sheet

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