

MATERIAL SAFETY DATA SHEET

CENTRE FOR STANDARDS ADDRESS : HARELBEKESTRAAT 72 9000 GENT BELGIUM
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SECTION I : IDENTITY

COMMON NAME	CHYMOTRYPSIN FIP STANDARD
ORIGIN	bovine pancreas
CAS	9004-07-3
LABELLING	Xn, R36/37/38, R42, S22, S24, S26, S36/37

SECTION II : HAZARDOUS INGREDIENTS

	PERCENT	TRESHOLD LIMIT VALUE (UNITS)
PRINCIPAL HAZARDOUS	Pure Material	Not Established

SECTION III : PHYSICAL DATA

BOILING POINT	n/a
SPECIFIC GRAVITY (H ₂ O = 1)	n/a
VAPOR PRESSURE (mm Hg)	n/a
PERCENT VOLATILE BY VOLUME (%)	n/a
VAPOR DENSITY (AIR = 1)	n/a
EVAPORATION RATE	n/a
pH	4.7 (1% solution)
LOSS ON DRYING	2 %
SOLUBILITY	sparingly soluble in water
INCOMPATIBILITIES	strong oxidising agents
REACTIVITY IN WATER	n/a
APPEARANCE AND COLOUR	white, amorphous powder (hygroscopic)
FLASH POINT	n/a
FLAMMABLE LIMITS	LOWER n/a UPPER n/a
IN AIR % BY VOLUME	n/a
EXTINGUISHER MEDIA	water spray, carbon dioxide, dry chemical powder or appropriate foam
AUTO-IGNITION TEMPERATURE	n/a

n/a = not applicable

SECTION IV : FIRE AND EXPLOSION HAZARD DATA

FLASH POINT	n/a
EXTINGUISHING MEDIA	Water, foam and powder
SPECIAL FIRE FIGHTING AND PROCEDURES	As with all fires, evacuate personnel to safe area. Fire fighters should use self-contained breathing equipment and protective clothing.
UNUSUAL FIRE AND EXPLOSION HAZARDS	This material is assumed to be combustible. As with all dry powders it is advisable to ground mechanical equipment in contact with dry material to dissipate the potential build-up of static electricity
FLAMMABLE LIMITS	LOWER n/a UPPER n/a
STABILITY	() Unstable (x) Stable
CONDITIONS TO AVOID	Material is stable from a safety point of view.
HAZARDOUS DECOMPOSITION PRODUCTS	Not known
HAZARDOUS POLYMERIZATION	() May Occur (x) Will Not Occur

SECTION V : HEALTH HAZARD DATA

TRESHOLD LIMIT VALUE	None established
EFFECTS OF OVEREXPOSURE	LD 50 (oral, rat) : > 4000 mg/kg Possible allergic reaction to dust if inhaled, ingested or in contact with skin. Can cause allergic skin reaction, and allergic respiratory reaction. Eye, skin and/or respiratory tract irritation Possible hypersensitization
ACUTE CHRONIC PRECAUTIONS TO CONSIDER	Persons developing hypersensitivity (anaphylactic) reactions must receive immediate medical attention. Avoid prolonged or repeated contact with skin. Material may be irritating to mucous membranes and respiratory tract. As a general rule, when handling FIP Reference Standards avoid all contact and inhalation of dust, fumes, mist, and/or vapours associated with the material. Keep container tightly closed and use with adequate ventilation; wash thoroughly after handling. Individuals working with chemicals should consider all chemicals to be potentially hazardous even if their individual hazards may be uncharacterized or unknown.

**MEDICAL CONDITIONS
AGGRAVATED BY EXPOSURE
EMERGENCY AND
FIRST AID PROCEDURES**

Hypersensitivity to material. Dermatologic problems.

Remove from exposure. Remove contaminated clothing. Persons developing serious hypersensitivity reactions must receive immediate medical attention. Upon eye or skin contact, flush affected area with copious quantities of water. Use general supportive measures. Obtain medical attention. If not breathing give artificial respiration. If breathing is difficult give oxygen.

1. INHALATION	May cause irritation of respiratory tract. Avoid inhalation. Remove to fresh air. If irritation occurs consult a doctor.
2. EYES	May cause irritation. Flush with copious quantities of water (at least 15 minutes)
3. SKIN	May cause irritation. Flush with copious quantities of water.
4. INGESTION	May cause irritation. Flush out mouth with water. If irritation occurs, seek medical advice.

In any case seek medical advice and call the nearest poison centre.

SECTION VI : SPECIAL PROTECTION INFORMATION

**RESPIRATORY PROTECTION
(SPECIFY TYPE)**

Anti-dust mask

VENTILATION

Adequate

LOCAL EXHAUST

Recommended

MECHANICAL (GENERAL)

Recommended

OTHER

n/a

PROTECTIVE GLOVES

Impervious/chemically compatible

EYE PROTECTION

Safety goggles

**OTHER PROTECTIVE CLOTHING
OR EQUIPMENT**

Protect exposed skin, appropriate laboratory apparel

SECTION VII : SPILL OR LEAK PROCEDURES**PRECAUTIONS TO BE TAKEN
IN HANDLING AND STORAGE**

Store in tight container. This material should be handled and stored per label and other instructions to ensure product integrity.

OTHER PRECAUTIONS

Avoid contact with eyes, skin or clothing. Avoid breathing dust or mist. Use with adequate dust control. Wash thoroughly after handling. Wear fresh clothing daily. Wash contaminated clothing before reuse. Do not permit eating, drinking or smoking near material.

**STEPS TO BE TAKEN IN CASE
MATERIAL IS SPILLED OR
RELEASED**

Wear approved respirator and chemically compatible gloves. Vacuum or sweep up spillage. Avoid dust. Place spillage in appropriate container for waste disposal. Wash contaminated clothing before reuse. Ventilate area and wash spill site.

WASTE DISPOSAL METHOD

Dispose of waste in accordance with all applicable Federal, State and local laws.

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