

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product Identifier

Product Name Danisco Xylanase 8000 L

Other means of identification

Material Number A03229
Synonyms Not applicable

Recommended use of the chemical and restrictions on use

Recommended Use Animal feed.
Restrictions on use Refer to product literature

Details of the supplier of the safety data sheet

Supplier Address

Danisco US Inc.
Genencor, a Danisco Division
3490 Winton Place
Rochester, New York 14623 USA
+1 (585) 256-5200
+1 (800) 847-5311

E-mail Address SDS-Genencor@Danisco.com

Emergency Telephone Number

Emergency Telephone Number +1 (319) 368-7657. For a Distribution incident - Spill, Leak, or Accident
CALL CHEMTREC - 800-424-9300 (within US)
DuPont registration number 671983

2. HAZARDS IDENTIFICATION

Classification

Respiratory sensitization	Category 1
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Label Elements

Emergency Overview

Signal Word: DANGER

Hazard Statements

H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled



Precautionary Statements

P261 - Avoid breathing dust/fume/gas/mist/vapors/spray

P285 - In case of inadequate ventilation wear respiratory protection

P304 + P341 - IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing

P342 + P311 - If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician

Hazards not otherwise classified (HNOC)**Other information**

Toxicity: None Known

3. COMPOSITION/INFORMATION ON INGREDIENTS**Synonyms** Not applicable.**Formula** Not applicable.**Description** Preparation

Chemical Name	CAS-No	%
Xylanase	9025-57-4	<1

4. FIRST AID MEASURES**First Aid Measures**

Eye Contact IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

Skin Contact IF ON SKIN: Wash with plenty of water and soap. If skin irritation occurs: Get medical advice/attention.

Inhalation IF INHALED: Remove person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.

Ingestion Rinse mouth. If swallowed. Call a POISON CENTER or doctor/physician if you feel unwell.

Most important symptoms and effects, both acute and delayed

Most important symptoms and effects, both acute and delayed May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Indication of any immediate medical attention and special treatment needed

Notes to Physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES**Suitable Extinguishing Media**

Extinguish with alcohol-resistant foam, fire extinguishing powder or water spray.

Unsuitable Extinguishing Media None.

Special Hazards:

None Known.

Explosion Data

Sensitivity to Mechanical Impact None.

Sensitivity to Static Discharge None.

Protective Equipment and Precautions for Firefighters

Positive pressure self-contained breathing apparatus (SCBA) and structural firefighters' protective clothing will provide adequate protection.

6. ACCIDENTAL RELEASE MEASURES**Personal precautions, protective equipment and emergency procedures**

Personal precautions, protective equipment and emergency procedures Avoid generation of dust and aerosols. Avoid breathing dust or spray mist. Use personal protection recommended in Section 8.

Environmental Precautions

Environmental Precautions Contain spill.

Methods and material for containment and cleaning up

Methods for Containment Cover with absorbent or contain. Collect and dispose.

Methods for Cleaning Up Use appropriate personal protective equipment (PPE). Contain and/or absorb spill with inert material, then place in suitable container. Prevent runoff from entering drains, sewers or waterways.

7. HANDLING AND STORAGE**Precautions for safe handling**

Precautions for safe handling Avoid generation of dust and aerosols. Avoid contact with eyes, skin and clothing. Avoid breathing (dust, vapor, mist, gas).

Conditions for safe storage, including any incompatibilities

Conditions for safe storage, including any incompatibilities Keep container tightly closed in a dry and well-ventilated place. Protect from light. Keep/store only in original container.

Incompatible Products None known based on information supplied.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION**Control parameters**

Exposure Guidelines Based on data available for ingredients.

Appropriate engineering controls

Engineering Measures Transfer via enclosed lines. Formulate in enclosed or ventilated mixing vessels. Carefully handle the substance to minimize releases of dust/aerosols.

Individual protection measures, such as personal protective equipment

Eye/Face Protection Wear safety glasses with side shields (or goggles).

Skin and Body Protection Wear protective gloves and protective clothing.

Respiratory Protection If exposure limits are exceeded, NIOSH/MSHA approved respiratory protection should be worn.

Hygiene measures

Handle in accordance with good industrial hygiene and safety practice. Regular cleaning of equipment, work area and clothing is recommended. Avoid contact with eyes, skin and clothing. Wear suitable gloves and eye/face protection.

9. PHYSICAL AND CHEMICAL PROPERTIES**Appearance**

Physical State	Liquid
Color	Brown
Odor	Typical odor of fermented product.
Odor Threshold	No data available
pH	4.0 - 5.0
Melting point/freezing point	No data available
Boiling point / boiling range	No data available
Flash Point	Not applicable
Evaporation rate	No data available
Flammability (solid, gas)	No data available
Upper/lower flammability or explosive limits	
Upper Flammability Limit	No data available
Upper explosive limits	No data available
Lower Flammability limit	No data available
Lower explosive limits	No data available
Vapor Pressure	No data available
Vapor Density	No data available
Relative density	No data available
Specific Gravity	1.1 - 1.2
Water Solubility	Soluble
Partition Coefficient (n-octanol/water)	No data available
Autoignition Temperature	No data available
Decomposition Temperature	No data available
Viscosity	No data available

10. STABILITY AND REACTIVITY**Reactivity**

Not expected.

Chemical stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Conditions to avoid

None known.

Incompatible Materials

None known.

Hazardous decomposition products

None known.

11. TOXICOLOGICAL INFORMATION**Information on likely routes of exposure****Product Information****Acute toxicity**

Inhalation	There is no data available for this product.
Eye Contact	Not expected to cause eye irritation.
Skin Contact	Not expected to cause irritation.
Ingestion	Toxicity Not expected.

Information on toxicological effects.

Symptoms No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization	May cause sensitization in susceptible persons. Repeated inhalation of enzyme containing aerosol (dust or mist) can cause a respiratory allergy in some individuals.
Mutagenic effects	There is no data available for this product.
Carcinogenicity	There is no data available for this product.
Reproductive effects	There is no data available for this product.
STOT - single exposure	There is no data available for this product.
STOT - repeated exposure	There is no data available for this product.
Aspiration hazard	Not expected.

Numerical measures of toxicity

Component Information Classification based on data available for ingredients.

Xylanase

Inhalation	LC50/inhalation/4h/rat > 5.1 mg/l.
Eye irritation	Not an irritant.
Skin irritation	Not an irritant.
Sensitization	Inhalation of enzyme mist/dust may cause allergic respiratory reactions, including asthma, in susceptible individuals on repeated exposure. May cause sensitization by inhalation.
Mutagenic effects	Not mutagenic in bacterial assays in the presence and absence of metabolic activation up to 5,000 µg/plate. Negative in chromosomal aberration using human lymphocytes.
Systemic toxicity	In a 90-day study in rats, there were no indications of toxicity or other changes attributed to treatment. A NOAEL can be established at 1140 mg/kg/d.

Chemical Name	ACGIH	IARC	NTP	OSHA
Xylanase 9025-57-4	None Known	None Known	None Known	None Known

The following values are calculated based on chapter 3.1 of the GHS document

ATE: Not applicable.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Classification based on data available for ingredients

0% of the mixture consists of components(s) of unknown hazards to the aquatic environment

Persistence and Degradability

Based on data available for ingredients

Bioaccumulation/Accumulation

No bioaccumulation potential

Mobility

Soluble in water

13. DISPOSAL CONSIDERATIONS**Waste treatment methods****Waste Disposal Methods**

Dispose of wastes in an approved waste disposal facility. Dispose of contents/containers in accordance with local regulations.

Contaminated Packaging

Dispose of empty containers and wastes safely. External recovery and recycling of waste should comply with applicable local and/or national regulations.

14. TRANSPORT INFORMATION

DEPT. OF TRANSPORTATION UN OR NA NUMBER Not regulated

15. REGULATORY INFORMATION**U.S. Federal Regulations**

Chemical Name	SARA 313 - Threshold Values %	CERCLA/SARA - Section 302 Extremely Haz
Xylanase	Not listed	Not listed

16. OTHER INFORMATION

Prepared By SDS-Genencor@Danisco.com

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SDS sections updated None

Disclaimer

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END OF SDS