

SAFETY DATA SHEET

IDENTIFICATION

Product Name: CPT XylaBrite 3000
Aqueous formulation of Xylanase enzyme

Product is a clear to slightly hazy dark brown liquid

Recommended for industrial use only as:

- An additive in the paper pulping industry,
- A processing aid for Food, Feed, and Brewing.

Industrial uses advised against: None.

MANUFACTURER: CPT Pulp and Paper, LLC
102 Old Mill Road
Cartersville, Georgia 30120-1688
Telephone: 1-770-606-8166

Transportation Emergency Number: CHEMTREC, 800-424-9300

2: HAZARDS IDENTIFICATION

Classification of the substance

Category 1: Respiratory sensitizer and irritant

Label elements



Pictograms: GHS08

Hazard statement: **Danger**
May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Precautionary statements:

Avoid breathing vapor or dust.

In case of inadequate ventilation wear respiratory protection.

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

If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.

Dispose of contents/container in accordance national and international regulations.

Repeated inhalation of enzyme aerosol may cause sensitization with allergic type reactions in sensitized individuals. Prolonged skin contact may cause irritation..

3: COMPOSITION / INFORMATION ON INGREDIENTS

This product contains a xylanase enzyme:

Component	CAS No.	EINECS/ELINCS	IUB No.	Amount
Xylanase	9025-57-4	232-800-2	3.2.1.8	about 4 %

Other Components:

Remaining components of this product (water/inerts) are proprietary, non-hazardous and/or are present at concentrations below reportable limits.

4: FIRST AID MEASURES

Description of first aid measures

Inhalation

Remove from contaminated area to fresh air. Seek medical attention if allergic response is exhibited.

Skin

Wash skin with soap and water. Remove contaminated clothes and wash before reuse.

Eye

Flush eyes with low pressure water for at least 15 minutes. Do not attempt to neutralize chemically. Seek medical attention immediately if irritation persists.

Ingestion

Give large quantities of water. If unconscious or in convulsion, take immediately to hospital or physician.

Most important symptoms and effects, both acute and delayed

The substance is a respiratory sensitizer and overexposure by inhalation may cause sensitization and allergic responses including breathing difficulties in hypersensitive individuals.

Indication of any immediate medical attention and special treatment needed

If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. If experiencing respiratory symptoms, call a POISON CENTER or doctor/physician.

5: FIRE-FIGHTING MEASURES

General Information: Clear fire area of all non-emergency personnel. During a fire, irritating and toxic gases may be generated by thermal decomposition and incomplete combustion of the components of this product after water has evaporated/boiled away.

Extinguishing Media: Any extinguishing media is suitable - use water, dry chemical, chemical foam, or CO₂.

Autoignition Temperature: Not known.

General Hazard: NFPA Rating: (estimated)
Health: 1
Flammability: 0
Instability: 0

Fire Fighting Instructions: Limit water runoff if it is likely to contain this material.

Fire Fighting Equipment: As a general precaution, fire-fighters should wear NIOSH/MSHA-approved self-contained breathing apparatus and full protective clothing. Cool containers exposed to fire with water. Wash away any of this product which may contact the body, clothing, or equipment.

Hazardous Combustion Products: Oxides of carbon, oxides of nitrogen are hazardous decomposition materials under fire conditions.

6: ACCIDENTAL RELEASE MEASURES

Contact emergency personnel and keep unnecessary personnel away.

General: Use appropriate Personal Protective Equipment (PPE). Contain the spilled material and clean up spills immediately. Removal by mechanical means is preferred. Solution may be placed into approved containers for disposal. Dilute remainder with plenty of water avoiding the formation of aerosols and flush to an approved drain.

Contaminated material is to be disposed of in accordance with State, local and Federal Regulations.

Large Spill: Try to prevent material from entering storm sewers or ditches leading to natural waterways. Dispose of large amounts of this material in an approved landfill.

7: HANDLING AND STORAGE

Segregate from acids, peroxides and all combustible organic or easily oxidizable materials. Keep from freezing. Protect against physical damage. Keep away from heat and flame.

Conditions for safe storage, including any incompatibilities

Keep away from heat and flame. Store in a cool, dry area in closed containers. Avoid accidental discharge into sewers and natural waters. Keep in original container. Empty container retains product residue.

8: EXPOSURE CONTROLS / PERSONAL PROTECTION

No national limit values established for xylanase. No OSHA PEL, TWA or STELs established.

Comply with all national and local guidelines.

Appropriate engineering controls

Efficient exhaust ventilation should always be provided to draw fumes and vapors away from workers to prevent routine inhalation.

Individual protection measures, such as personal protective equipment

Eye/face protection: Goggles / Safety Glasses

Skin/hand protection: Impervious gloves, such as Neoprene or polyvinyl alcohol, should be worn when handling chemicals. Long Sleeve shirt / Rubber apron / Safety shoes are recommended.

Respiratory protection: Wear a NIOSH/MSHA approved respirator when significant exposure to mist or fumes is likely.

Environmental exposure controls

Avoid accidental discharge into sewers and natural waters. Spilled material should be removed immediately to avoid the formation of aerosols.

9: PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Liquid

Vapor Pressure: not determined.

Specific Gravity: About 1.02

Solubility in Water: Completely miscible in water.

PH: 8-9 (as received).

Freezing/Melting Point: not determined.

Vapor Density: same as water vapor

Odor: fermentation odor

Appearance: Clear to slightly hazy dark brown liquid.

10: STABILITY AND REACTIVITY

Reactivity

None identified

Chemical stability

Stable

Possibility of hazardous reactions

None identified; hazardous polymerization does not occur.

Conditions to avoid

None known

Incompatible materials

None known

Hazardous decomposition products

None

11: TOXICOLOGICAL INFORMATION

Acute toxicity: ingestion of this material is not known to result in significant adverse effects. Stomach upset/discomfort may be experienced. Oral toxicity (rats): LD50 > 9 g/kg bw/day (by calculation).

Skin corrosion/irritation: this material is not known to be a skin irritant, but it is recommended that prolonged contact with the skin be avoided.

Serious eye damage/irritation: repeated exposure/overexposure of the eye is characterized by irritation.

Respiratory or skin sensitization, respiratory sensitizer: repeated exposure/overexposure by inhalation may cause sensitization and allergic response in hypersensitive individuals.

Germ cell mutagenicity: no data available.

Carcinogenicity: this product does not contain any substances that are considered by OSHA, NTP, IARC or ACGIH to be "probable" or "suspected" human carcinogens; no additional test data found for product.

Reproductive toxicity: no data available.

Aspiration hazard: see respiratory sensitization

12: ECOLOGICAL INFORMATION

Toxicity

Not significantly ecotoxic:

Daphnia magna: LC50 and EC50 1,520 mg/L*

Fathead minnow: LC50 and EC50 43 mg/L*

Algae P. subcapita: EC50 and NOEC > 5,000 mg/L*

**Actual analysis performed on same fermentation at higher concentration.*

Persistence and degradability

No specific data available, however, the substance is miscible in water and is not likely to be persistent. In addition, the substance is an enzyme and enzymes are known to be fully biodegradable.

Bioaccumulative potential

No specific data available, however, the substance is miscible in water and is not likely to be bioaccumulative. Also, enzymes are known to be fully biodegradable and therefore would not bioaccumulate.

Mobility in soil

No data available.

Results of PBT and vPvB assessment

No specific data available, however, the substance is miscible in water and is not likely to be persistent or bioaccumulative. In addition, the substance is an enzyme and enzymes are known to be fully biodegradable and not bioaccumulative. The substance does not meet the criteria for characterization as either a PBT or vPvB.

Other adverse effects

No other adverse effects known.

13: DISPOSAL CONSIDERATIONS

Waste Disposal Method: Chemical additions, processing or otherwise altering this material may make waste management information presented in this MSDS incomplete, inaccurate or otherwise inappropriate. Please be advised that state and local requirements for waste disposal may be more restrictive or otherwise different from Federal laws and regulations. Consult any regional local authority requirements regarding the proper disposal of this material.

Container Handling and Disposal: Rinse containers before disposal.

14: TRANSPORT INFORMATION

UN number

None assigned. The substance is not classified as hazardous for transport by UN, IMO, IATA, or U.S. DOT.

UN proper shipping name

Not applicable because this product is not classified as a hazardous material in transportation.

Transport hazard class

Not applicable

Packing group

Not applicable

Environmental hazards

The substance is not classified as hazardous for transport (UN, IMO, IATA, DOT, etc.)

Special precautions for user

The substance is not classified as hazardous for transport (UN, IMO, IATA, DOT, etc.). See sections 7 and 8 for more handling information.

15: REGULATORY INFORMATION

TSCA Section 12b Export Notification Requirements:

None of the chemicals in this product are listed under TSCA Section 12b.

TSCA Significant New Use Rule:

None of the chemicals in this material are subject to a SNUR under TSCA.

CERCLA Hazardous Substances and corresponding RQs

None of the chemicals in this material have an RQ.

SARA hazard categories (EPCRA 311/312): Not hazardous.

SARA Section 313:

No chemicals in this product are reportable under Section 313.

Clean Air Act:

This product does not contain any hazardous air pollutants.

This product does not contain any Class 1 Ozone depletors.

This product does not contain any Class 2 Ozone depletors.

Clean Water Act:

No chemicals in this product are listed as Hazardous Substances under the CWA.

None of the chemicals in this product are listed as Priority Pollutants under the CWA.

None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

RCRA

Not considered a RCRA hazardous waste under 40 CFR 261.

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.

International Regulations

Canadian Environmental Protection Act: All of the components of this product are included on the Canadian Domestic Substances list (DSL).

European Inventory of Existing Chemicals (EINECS): All of the components of this product are included on EINECS.

16. OTHER INFORMATION

Xylanase is listed in Chapter XXXVI of the German Federal Institute for Risk Assessment (BfR) database. Thus, use of Xylanase for production of paper and paperboard for food contact is recommended by BfR (there must be no detectable residual activity of this enzyme in the finished product).

National Fire Protection Association (NFPA) Ratings: This information is intended solely for the use of individuals trained in the NFPA system.

Health: 1

Flammability: 0

Reactivity: 0

Revision Indicator: This SDS replaces the SDS dated January 20, 2020. The information contained herein has been reviewed and reapproved as of June 5, 2023.

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. This information is furnished without warranty, expressed or implied, except that it is accurate to the best knowledge of CPT Pulp and Paper, LLC. The data on this sheet relates only to the specific material designated herein. CPT Pulp and Paper, LLC assumes no legal responsibility for use or reliance upon these data.