



BENEFIT

Reduces process time

Provides efficient Brightening of Recycle writing /printing paper

Increases strengthening of Recycle writing /printing paper

Efficient and specific in action

Enhances efficiency of subsequent processes

Eco-friendly and bio-degradable

DESCRIPTION

Paperzyme BS is a paper industry mixture of enzymes to be used in brightening & strengthening of recycle writing /printing papers. Paperzyme BS are mixture of bacterial xylanase and laccase enzyme preparation produced by a selected strain of *Bacillus Species*.

The enzymes will hydrolyse beta 1, 4 bonds in xylans and arabinoxylans. Laccase present in Paperzyme BS functionalize Lignocellulosic fiber present in paper to improve chemical & physical properties of paper. Also, graft various phenolic acids derivatives onto fiber and increase hydrophobicity or charge of fiber present in paper. Paperzyme BS also contains some amount of beta glucanase and cellulase as side enzymes.

Paperzyme BS is a ready-to-use formulation of enzymes and other ingredients for high-performance enzyme preparation for paper industry.

PRODUCT SPECIFICATION TYPE

1 KODOOT OI DOII 10/ KITOK TITLE	
Product type	Light brown to pale yellow powder
Parameters	
Temperature operational Range	25°C-75°C
pH operational Range	6.0-9.0
Enzyme Types	Ligninase +Xylanase mixture
Enzyme activity	Trade secret
Sources of enzymes	Bacillus subtilis

PAPERZYME BS [APPLICATION & DOSAGE]

Many factors that influence with Paperzyme BS, like pH and temperature of the process, process time, dosage, etc.

APPLICATION & DOSAGE	Add 150 gram enzyme product per 1500 kilogram of
	recycle paper of printing/writing loaded in Hydropulper

PACKAGING:

Enzymes products are available in 25 Kilogram HDPE drum for powder products and kilogram jerry can for liquid products. Special packaging is also available on request.

SAFETY

The product is produced under hygienic condition and is subject to stringent quality control.

Toxicology

The product produced by GRAS microorganism and is classified as non toxic.

Biodegradability

Product is Biodegradable.

Handling precaution

Enzymes are proteins and inhalation of dust or aerosols may induce sensitization and may cause allergic reactions in sensitized individuals. Some enzymes may irritate the skin, eyes and mucous membranes upon prolonged contact.

Liquid enzyme products may create inhalable aerosols if splashed or vigorously stirred. Spilled product material should therefore be flushed away with water.

STORAGE:

Enzyme products should be stored in a cool dry place. When stored below 35°C products will maintain its declared activity for at least 24 months. The enzyme preparation should not be left in direct sunlight for extended periods. Liquid preparation should not be frozen.

REGULATORY INFORMATION:

EEC Classification

In concentration form, the liquid enzymes products are classified as "sensitizers by inhalation" under the terms of EEC directive 88/379.

TECHNICAL SERVICE:

Aum Enzymes technical service laboratory shall be pleased to provide more information covering specific applications for all products or discuss any practical problem which many occur in the industry.

Technical datasheet given with each product are only given as usage guidelines, but tests should be carried out under local conditions to fix the optimum dosage for the machine type and conditions.

MFG: AUM ENZYMES

Nr. Jalaram Mandir, BORSAD-388 540.

Dist. Anand. (Gujarat)India. Mobile: +91-9898383455

E-mail: info@aumenzymes.com, aumenzymes@gmail.com.

Website: <u>www.aumenzymes.com</u>