



BENEFIT

Reduces process time
Provides efficient deinking of Recycle writing /printing paper
Efficient and specific in action
Decrease the use of deinking chemicals
Decrease the use of ink count
Eco-friendly and bio-degradable

DESCRIPTION

Paperzyme DI is a paper industry mixture of enzymes to be used in **deinking of Recycle writing /printing papers**. Paperzyme DI are mixture of bacterial cellulase and hemicellulase enzyme preparation produced by a selected strain of *Bacillus Species*.

Paperzyme DI contain bacterial Cellulase & hemicellulase which are help functionality release ink particles, both bound to fibers fines and separately from fiber, and thereby enhancing the removal of ink by flotation. Paperzyme DI also contains some amount of protease as side enzymes.

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

PRODUCT SPECIFICATION TYPE

| Product type | Off white to pale yellow powder |
|-------------------------------|---|
| Parameters | |
| Temperature operational Range | 25°C-75°C |
| pH operational Range | 6.0-9.0 |
| Enzyme Types | Cellulase& Hemicellulase mixture enzyme |
| Enzyme activity | Trade secret |
| Sources of enzymes | Bacillus subtilis |

PAPERZYME DI [APPLICATION & DOSAGE]

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

| APPLICATION & DOSAGE | Add 300 gram enzymes 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.

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