



Lactoperoxzyme

Benefits

Ecofriendly and biodegradable Antimicrobial properties Resistant to proteolysis Protein iodination Specific in action High substrate specificity Highly pure form Useful for various formulations

Description

Lactoperoxzyme is an enzyme extracted from premium quality bovine milk. It has been shown to be bacteriostatic against gram positive and exhibits pH dependent bacteriological action against gram negative organisms in presence of thiocyanate and hydrogen peroxide. Lactoperoxzyme is novel bovine enzyme chemically glycoprotein in nature and may exist in two iso enzyme forms. Lactoperoxzyme is suitable for use bio preservative formulation.

Lactoperoxidase catalyzes the hydrogen peroxide oxidation of iodide as shown below:

Lactoperoxidase

 $2I- + H_2O_2 + 2H+ ----> I_2 + 2H_2O$

The enzyme also catalyzes the oxidation of phenols and aromatics in the presence of hydrogen peroxide. Bovine milk is usually used as a source for isolation and purification of Lactoperoxidase.

PRODUCT SPECIFICATION

Parameters	Operational	Optimal range
	range	
Temperature	20°C to 40°C	25°C
pH	4.0 to 7.0	5.9 to 6.8
Form & appearance	Micaceous Coffee brown to light brown Powder	
Enzyme type	Lactoperoxidase	
Enzyme activity	>110 IU/gram [ABTS oxidation]	
[ABTS oxidation]		•
Source	Bovine milk	

PAKAGING:

Enzymes products are available in 1/5/25 gram glass tube for powder products. Product packaging in thermo safe box with low temperature maintenance. 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 is classified as non toxic.

Biodegradability

Product is Biodegradable.

STORAGE:

Enzyme products should be stored in a cool dry place. When stored below 20°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.

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 application type and conditions.

AUM ENZYMES

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