

Technical Data Sheet

Kem Cat 1000

INTRODUCTION

Kem CAT 1000 is a enzyme extracted from the Bovine intestine, supplied as a concentrate

APPLICATION

Kem CAT 1000 (Catalase) is used in Textile for effective “Bleach Clean-up”. This enzyme breaks down Hydrogen Peroxide into Water and nascent Oxygen and hence helps to remove residual peroxide from the bath.

PROPERTIES

Appearance	Amber Colour Liquid
Chemical Character	Catalase
Odor	Slight Fermentation Odour
Solubility in Water	Completely soluble in water
pH(1% solution)	6.7
Application pH range	6.5 to 8.0 optimum 6.7
Application Temperature Range	50-55 °C

STABILITY

Metal Ions	Fe and Cu ions are poisonous for enzymes
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COMPATIBILITY

Non-ionic surfactants	Generally very good
Organic sequestrants	Generally good
Oxidizing/Reducing Agent	Will hamper the performance of the enzymes.

METHOD OF DILUTION:

Kem CAT 1000 is supplied as a concentrate, allowing flexibility and economy of use. It is diluted with water and other additives like Organic Sequestrants etc. The ratio in which this dilution is done dependant upon the quality of fabric to be processed and the customer requirements. The recommended dilution would be upto **1:5**. The dilution is achieved by addition of Enzyme concentrate to the already prepared solution of the additives whose pH has been maintained to the optimum pH of the Enzyme concentrate. Slow stirring is advised to ensure a homogeneous product. The enzyme dosage can be anything between 0.1 to 0.5% o.w.f depending on the residual peroxide present in the processed fabric

INACTIVATION

The enzyme bath can be inactivated by raising the pH above 11.0 for 15 minutes or raising the temperature above 85°C for 10 minutes

BENEFITS

- 1 Efficiently reduces residual peroxide to water and nascent oxygen
- 2 Same bath can be used for the next process that is dyeing.
- 3 Due to exhaustion of residual peroxide from the bath the uniform dyeing is achieved
- 4 The effluent load due to presence of peroxide is also reduced.
- 5 Eco-friendly and bio-degradable

PACKAGING

25 Kgs packing in non-toxic plastic carboys

SHELF LIFE

For maximum shelf life, it is recommended to store the product at lower temperature (less than 25°C). Enzyme can be stored upto 6 months at 25°C for one year at 5°C. The enzyme activity is not less than 90% of the labeled value.

SAFETY AND HANDLING MEASURES

Enzyme preparation belongs to protein, which may include sensitization and cause allergic type reaction in sensitive individuals. Prolonged contact may cause minor irritation for skin, eyes or mucous membrane of nose. So any direct contiguity with human body should be avoided. If irritation or allergic response for skin or eyes develops, consult a doctor.

TECHNICAL SERVICES

Chembond Chemicals Ltd. believes in providing complete technical assistance by conducting on-site trials and demonstrations. Our aim is to improvise the existing processes and develop new products as per the market requirements. We all strive hard to achieve complete Customer satisfaction. For any further queries, please feel free to call our Sales/ Technical representatives.

Your co-operation will help us serve you better