

OPTIMASE® CA 800L

Liquid Catalase

DESCRIPTION

OPTIMASE® CA 800L enzyme is a liquid catalase product that is highly effective for decomposition of hydrogen peroxide in a wide range of industrial applications. The OPTIMASE® CA 800L catalase is derived from the submerged fermentation of a genetically modified strain of *Trichoderma reesei*.

APPLICATION GUIDELINES

Hydrogen peroxide is used as a bleaching, cleaning, or sanitizing agent in many industrial applications and it may be necessary to completely remove or significantly reduce the concentration of hydrogen peroxide after it has accomplished its function. The Optimase® CA 800L enzyme is highly effective for decomposition of hydrogen peroxide over a wide range of temperature, pH, and peroxide concentrations.

PRODUCT CHARACTERISTICS

Activity: 8,500 – 10,000 U/g*

Appearance: Dark green liquid

(*The activity of OPTIMASE® CA 800L catalase is expressed in Baker Units (U). One Baker Unit is defined as the amount of enzyme that decomposes 264 mg hydrogen peroxide in one hour at 25°C (77°F) and pH 7.0. A detailed assay method is available upon request.

BIOCHEMICAL PARAMETERS

Enzyme type: Fungal catalase

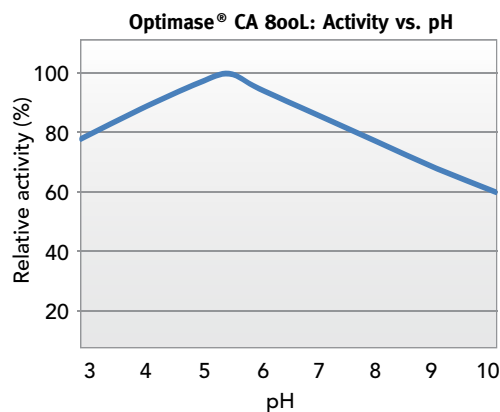
EC/IUB#: 1.11.1.6

CAS#: 9001-05-2

Inhibitors: Some phenolic compounds, cyanides, azides

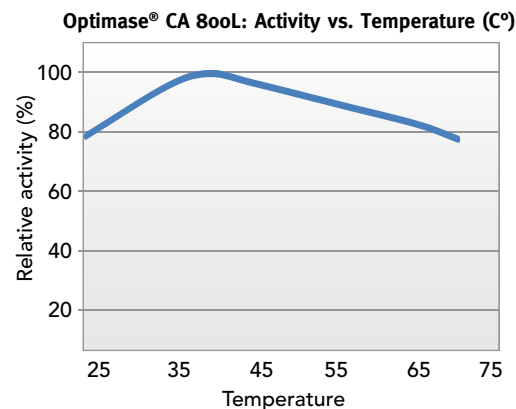
PH DEPENDENCY

The OPTIMASE® CA 800L catalase is active over the pH range from 3.0 to 9.0 with optimum performance at pH 5.5. The exact pH optimum will depend on process variables, including temperature, hydrogen peroxide concentration, and the presence of other components.



TEMPERATURE DEPENDENCY

OPTIMASE® CA 800L is effective in the temperature range from 30°C (85°F) to 70°C (158°F) with optimum performance at 40°C (105°F). The exact temperature optimum will depend on process variables including pH, hydrogen peroxide concentration, and the presence of other components.



DOSAGE

The exact dosage of OPTIMASE® CA 800L will depend on a variety of factors including initial hydrogen peroxide concentration, pH, temperature, time requirement, and the desired final hydrogen peroxide concentration.

PACKAGING & STORAGE

OPTIMASE® CA 800L enzyme is available in various standard package sizes. Please contact DuPont for detailed information.

OPTIMASE® CA 800L will meet the declared activity of 8,500 U/g upon arrival at the customer's plant.

Store OPTIMASE® CA 800L enzyme at refrigerated temperatures (20° C or lower) to assure extended shelf life. Storage and stability information is available upon request.

During storage, OPTIMASE® CA 800L enzyme will maintain its stated activity for at least six months when stored in a sealed container at ≤37°C (98.6°F). For more information on the storage of this product, please contact DuPont.

REGULATORY STATUS

OPTIMASE® CA 800L enzyme is an industrial grade enzyme preparation.

SAFETY & ENZYME HANDLING

Inhalation of enzyme dust and mists should be avoided. In case of contact with the skin or eyes, promptly rinse with water for at least 15 minutes. For detailed handling information, please refer to the appropriate Material Safety Data Sheet, the Enzyme Technical Association (ETA) handbook "Working Safely With Enzymes", and the Association of Manufacturers and Formulators of Enzyme Products (AMFEP) handbook "Guide to the Safe Handling of Microbial Enzyme Preparations". All are available from DuPont.

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