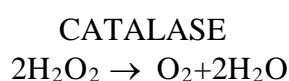


CATALASE NSD

Description:

CATALASE NSD enzymes, a concentrated industrial grade liquid catalase derived from a submerged fermentation of self cloned genetically modified strain of *Aspergillus Niger*.

The enzyme effectively catalases the transformation of residual hydrogen peroxide into oxygen and water. The product is specific for hydrogen peroxide and will not interfere with dyestuffs.



Advantages :

CATALASE NSD enzyme is ideally suited for use following bleach clean up. It should be prior to reactive dyestuffs which are sensitive to residual peroxide and efficiency at high concentration of hydrogen peroxide and residual chemical reducing agents. The board pH and temp. ranges and efficiency at high concentration of hydrogen peroxide this product to accommodate a Varsity of bleach protocols.

The advantages of using **CATALASE NSD** enzyme include.

- Reduced dyeing preparation time.
- Eliminates residual hydrogen peroxide while reducing water consumption
- Enzyme is completely biodegradable
- Enzyme and breakdown products(water and oxygen) have no effect on dyestuffs.

Characteristics Activity 840 BU/g (minimum)

Appearance. Dark brown liquid.

PH at 25C 5.2

Specific gravity :1.2

Solubility : Complete insoluble in cold water

The activity of **CATALASE NSD** is expressed in Baker Unit is defined as the amount of enzyme that decomposes 264 mg of hydrogen peroxide in one hour at 25C and pH7

Process conditions: CATALASE NSD performs effectively across board pH and temperature range..

Typical processing conditions.

pH	3-9
Temp.	30-65°C (86-149 °F)
Time	10-20 minutes
Dose	0.1-0.4g/l

Application

This application is designed for use with jet dye machines, winches, jiggerr,beeks,cleanup is.

Bleach-Rinse*-Drain-Rinse-Dye. (*add reducing agent)

Using CATALASE NSD reduces the number of steps in the cleanup process and the number of rinses required while also eliminating the need for additional a reducing agent. The recommended cleanup for CATALASE is

Bleach, Rinse*,Dye (*add CATALASE NSD enzyme)

the execution of bleach cleanup and preparation for fabric dyeing using CATALASE is easily achieved by following these steps

- 1-Drain the bleaching liquor bath
- 2-Refill the bath with fresh water ,using the temp .and liquor ratio appropriate for subsequent dyeing
- 3-Check the pills in the range of 3to9and that the bath temp. is bellow 65°C
- 4-Add 0.1to0.4g/l CATALASE NSD enzyme begin circulation.
- 5-after 10 minutes test for residual hydrogen peroxide in the bath .if hydrogen peroxide still remains wait 5 to minutes and test again
- 6-Once the elimination of hydrogen peroxide has been verified ,begin the dyeing procedure in the same bath liquor..

Storage and stability.

CATALASE . should be stored under cool conditions with the container closed. The product will maintain stated activity for at least six months when stored in a sealed container at 35°C