GFzyme-Katalase™ S 350L

Catalase

Catalase is an enzyme that presents in the cells of plants, animals and aerobic (oxygen requiring) bacteria. It promotes the conversion of hydrogen peroxide, a powerful and harmful oxidizing agent, into water and molecular oxygen.

It is widely used for removal of H_2O_2 in textile industry, semiconductor and HPPO factory. It saves time and energy and is environmental-friendly.

$$2H_2O_2 \longrightarrow 2H_2O + O_2$$

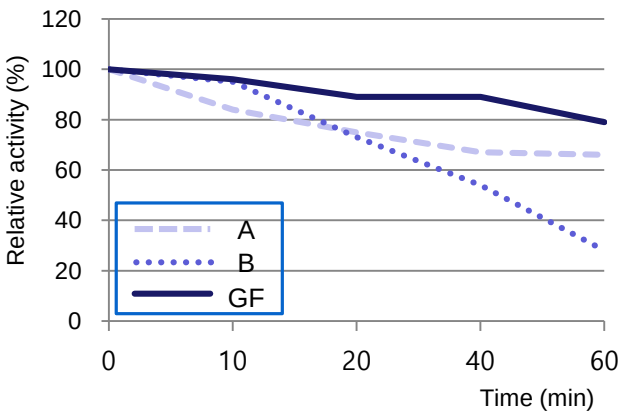
$$H_2O_2 + RH_2 \longrightarrow 2H_2O + R$$

◆ Benefits for the textile and the wastewater treatment industry

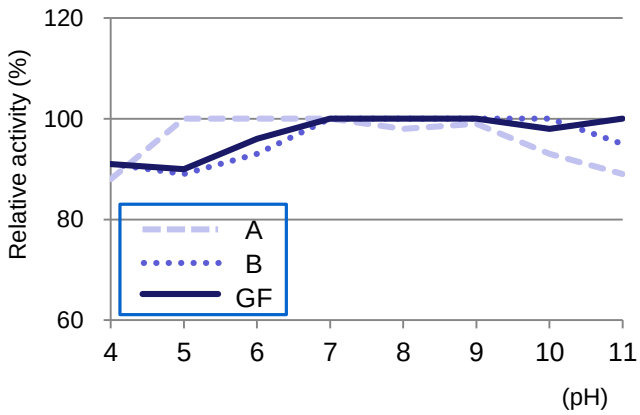
- Removal of residual hydrogen peroxide (H_2O_2)
- Reduction of water consumption
- Reduction of energy and time consumption
- No damage to dyestuff and fabrics
- Eco-friendly and bio-degradable

◆ Stability test for temperature and pH

Heat Stability at 70℃



pH Stability (after 1 hour)



GenoFocus, Inc. 65 Techno 1-ro, Yuseong-gu, Daejeon 34014, Korea
Tel.: 82 42 862 4483 Fax: 82 42 862 4484
www.genofocus.com

Characteristics

- Source: Thermostable Fungi
- Activity: > 350,000 unit/ml (at pH 7.0)
- Appearance: brown to dark brown liquid
- pH: 5.0 (±1.0)

Recommendation of operational condition

- Stable pH range: pH 4.0 ~ 11.0
- Optimum pH: pH 6.0 ~ 8.0
- Temperature stability: stable at 70℃ for one hour
- Optimum temperature: 35~55℃
- Process time: 5~20 minutes
- Dosage: 0.01~0.05 g/L

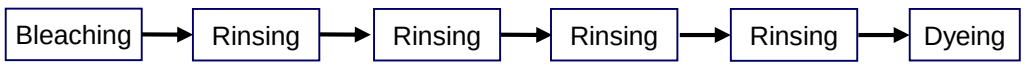
Guideline for the bleach clean-up

- Drain the bleaching liquid
- Fill the bath with suitable amount of fresh water
- Adjust pH and temperature for using enzyme
- Add 0.01~0.05 g/L of GFzyme-Katalase™ S 350L
- After 5~20 minutes, continue dyeing procedure in the same bath

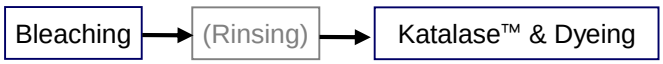
(Generally no need to change water, but if needed, change water for elimination of impurities)

Comparison of the process

- Rinsing with water



- Using GFzyme-Katalase™



Package and Storage

- Package unit: 20 kg, 200 kg drum and 1 ton bulk
- Storage: avoid a direct ray of light and keep cool

Expiry date

- Katalase™ S 350L : 12 months

GenoFocus, Inc. 65 Techno 1-ro, Yuseong-gu, Daejeon 34014, Korea
Tel.: 82 42 862 4483 Fax: 82 42 862 4484
www.genofocus.com