

## Specification

Reagent for detection of catalase activity.

## Presentation

	Packaging Details	Shelf Life	Storage
1 dropper bottle Bottle - Dropper with: 30 ± 0.5 ml	1 box with a bottle - dropper 30 ml	24 months	8-25 °C

## Composition

Hydrogen peroxide 3 % w/v

## Description /Technique

### Description:

Hydrogen peroxide, an end product of aerobic carbohydrate metabolism, is extremely toxic to bacteria. Bacteria containing the enzyme catalase break down hydrogen peroxide into oxygen and water. Microorganisms that possess catalase demonstrate the reaction by the rapid appearance of gas bubbles.

### Catalase Test:

Add 2-3 drops of reagent on the colony. The appearance of bubbles on the colony confirms that the microorganism is catalase positive.

Note: this reagent concentration is indicated for most bacteria, for some anaerobics and *Neisseria* a more concentrated reagent should be used.

## Quality control

### Physical/Chemical control

Color : Colourless                      pH: at 25°C

### Microbiological control

Dispense the reagent to isolated colonies

Analytical methodology according to ISO 11133:2014/A1:2018; A2:2020.

Dispense reagent to the following microorganisms

Microbiological control according to ISO 11133:2014/A1:2018; A2:2020.

### Microorganism

*Enterococcus faecalis* ATCC® 19433, WDCM 00009

*Enterococcus faecium* ATCC® 6057, WDCM 00177

*Lactobacillus delbrueckii ssp* ATCC® 7830

*Staphylococcus aureus* ATCC® 6538, WDCM 00032

*Camp. coli-jejuni* ATCC® 33291, WDCM 00005

*Listeria innocua* ATCC® 33090, WDCM 00017

*Listeria ivanovii* ATCC® 19119, WDCM 00018

*L. monocytogenes* ATCC® 13932, WDCM 00021

### Growth

Negative

Negative

Negative

Positive

Positive

Positive

Positive

Positive

### Sterility Control

Not Performed - Chemical Reagent without nutritive properties.

Reference: 941970ZA      Technical Data Sheet

Product: **CATALASE REAGENT 3%**



## Bibliography

- In Balows, A., et al. Chapter 122. 1991 Manual of Clinical Microbiology. 6th Edition. American Society for Microbiology, Washington, D. C.
- Cowan and Steel,s manual for identification of medical bacteria. 1993. 3rd. Edition edited and revised by G.I. Barrow and R.K.A. Feltham. Cambridge University Press, Cambridge USA.
- Kinyou, 1915. American Journal of Public health 5:867
- ISO 11133:2014/ Adm 1:2018/ Adm 2:2020/ Microbiology of food, animal feed and water. Preparation, production, storage and performance testing of culture media.