

# BIONOVA®



#### **Product name**

**BT105/2** – Spore suspension for direct inoculation of products or preparation of customized biological indicators for monitoring Ethylene Oxide and Dry Heat Sterilization Processes.

#### Use

For monitoring Ethylene Oxide (EO) and Dry Heat Sterilization Processes.

# **Applicable regulations**

EN ISO 11138-1:2007 and EN ISO 11138-2:2009, EN ISO 11138-4:2007; IRAM 37102-1:1999 and IRAM 37102-2:1999.

# Classification

Class 1, according to risk.

#### Authorization

Designed under Quality Systems ISO 9001:2008 and ISO 13485:2012. ANMAT (Argentinean National Administration of Drugs, Food and Medical Technology) PM-1614-1.

# **Product characteristics**

Glass bottle: 18 mm diameter, 0.3 mm thick wall, 60.7 mm high. Plastic cap: 16 mm external diameter, 9.4 mm high. *Bacillus atrophaeus* ATCC 9372 spores. Population: 10<sup>1</sup> spores/0.1 ml. Prepared in 40% ethanol. Parameters specified: D-Value<sub>EO</sub> is provided. Conditions: 600 mg/l EO, 60% RH, 54 °C. D-Value<sub>DRY</sub> is provided. Calculated at 160 °C. Another D-value is estimated at 170 °C for the calculation of Z-Value<sub>DRY</sub>. Z-Value<sub>DRY</sub> is provided. Upon completion of the sterilization cycle, the inoculated product should be tested in a suitable culture medium at 37 °C. We suggest the use of culture media BIONOVA® MC1020 or MC1030 to final reading in 48 hours. For conventional culture media like TSB, incubation for 7 days at 37 °C is recommended.

# Environmental conditions during manufacture

Refrigeration during inoculation. Sterility conditions are necessary only during the filling and sealing process, carried out under laminar flow conditions.

#### **Storage conditions**

For short-term use, store at 2-8 °C in refrigerator. Freeze to store for long periods (-10 to -25 °C). RH: 35-60 %. Keep out of direct light.

#### **Transportation conditions**

Storage conditions should be strictly followed.

Transport in closed reinforced boxes to avoid damage. This product does not represent a risk for health. Bottles can be stored at temperature below  $30 \,^{\circ}$ C for up to 15 days during transportation.

#### **Shelf life**

24 months.

#### Packing

1 bottle with 10 ml of spore suspension within a plastic bag.

#### Labelling

On the bottle: Product code and description, presentation and spore concentration, directions for use, batch number, manufacture and expiration date and manufacturer information.

#### **Possible target markets**

Healthcare and Industry.

#### Other important information (optional)

It is recommended to incubate at 37  $^{\circ}\mathrm{C}$  in BIONOVA\* IC10/20 incubator.

Read product's directions for use thoroughly before use.

Note: When necessary, limits for each product's parameters should be specified.



# Description of identified and/or predictable risks and situations which could represent a risk for the product.

Do not store the product near sterilizing agents.

Do not expose this product to Steam,  $H_2O_2$ , Radiation or any sterilization process other than EO and/or Dry Heat.

The positive biological indicator can be sterilized in gravity air displacement steam sterilizers at 121°C for at least 20 minutes or at 132 °C for at least 15 minutes, or at 134 °C for at least 10 minutes in vacuum-assisted steam sterilizers.

Note: Spores can be incubated in culture media BIONOVA® MC1030 or MC1020 culture media or other culture medium made up of soybean casein and yeast extract.