



Self-contained Biological Indicators

Bionova® Self-contained biological indicators BT10 BT20 BT30 BT80 BT91 BT100

Bionova® self contained biological indicators were developed to control steam, dry heat, ethylene oxide, moist heat, peroxide hydrogen plasma and formaldehyde sterilization processes. Biological indicators contain bacterial spores embedded in a carrier packaged within a special plastic tube. Inside the tube, there is a sealed-glass ampoule with a specially-formulated culture medium containing a pH indicator which turns dramatically to yellow when spores grow. Bionova® biological indicators produce visible results within 24 hours (steam, plasma) or 48 hours (ethylene oxide, formaldehyde, moist heat, dry heat).

Bionova® biological indicators are certified for species, population, purity and resistance (D value, Z value and survival/ kill data).

Bionova® biological indicators are developed and manufactured under ISO 9001 and ISO 13485 certified systems.

The quality parameters are determined at the time of manufacturing according to ISO 11138 (Parts 1, 2, 3, 4 and 5) standard.

Advantages

- A specially formulated synthetic medium allows to get results in short times. Long-term incubations do not represent an advantage.
- Cross contamination risk reduction.
- Handling and analysis cost reduction.
- Laboratory ovens are not required since culturing may be performed in incubators for biological indicators.
- Class 1 chemical indicator on label.
- Label allows assay data registration.



BT10 / Ethylene Oxide
Bacillus atrophaeus ATCC 9372



BT20 / Steam
Geobacillus stearothermophilus ATCC 7953



BT30 / Dry Heat
Bacillus atrophaeus ATCC 9372



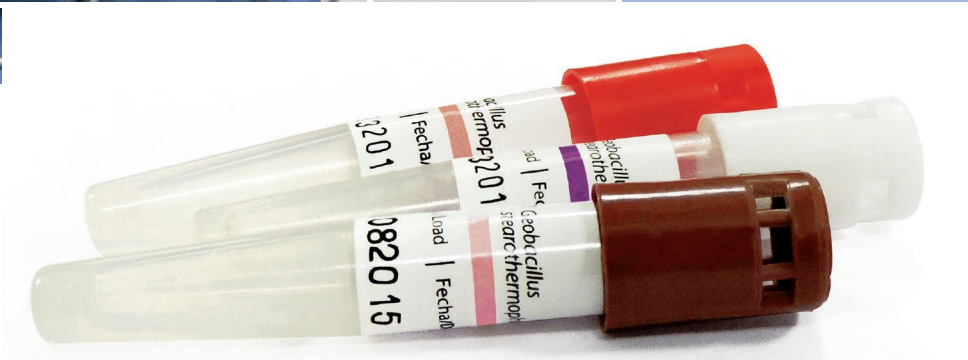
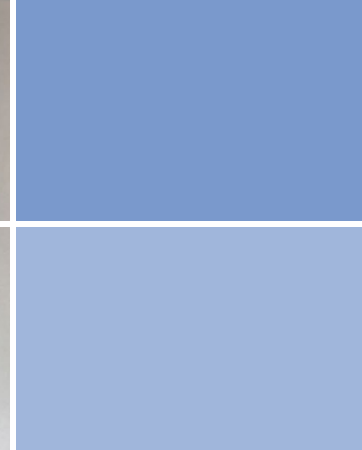
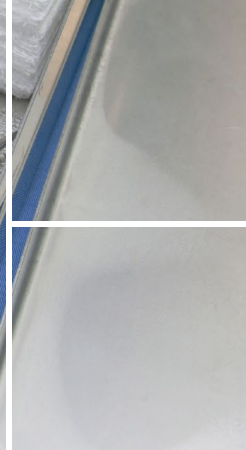
BT80 / Moist Heat
Bacillus atrophaeus ATCC 9372



BT91 / Hydrogen Peroxide
Geobacillus stearothermophilus ATCC 7953



BT100 / Formaldehyde
Geobacillus stearothermophilus ATCC 7953



BT90 / Hydrogen Peroxide
Geobacillus stearothermophilus ATCC 7953



BT101 / Formaldehyde
Geobacillus stearothermophilus ATCC 7953



BT200 / Steam
Geobacillus stearothermophilus ATCC 7953

Bionova® F1 Rapid readout colorimetric system biological indicators

BT90 BT101 BT200

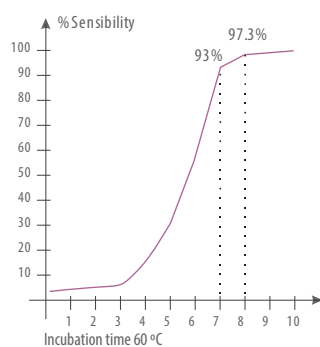
Bionova® F1 Rapid Readout Colorimetric self contained biological indicators system were developed for the easy evaluation of steam, peroxide hydrogen plasma and formaldehyde sterilization processes. The system contains a tube with a conic base and a special filter that keeps the broken glass at the top of the tube. An easy readout can be carried out using the reference color chart under the white light source. The use of the reference color chart allows an easy detection of positive biological indicator with a final reading within the first 8 hours of incubation with more 97% sensibility.

Advantages

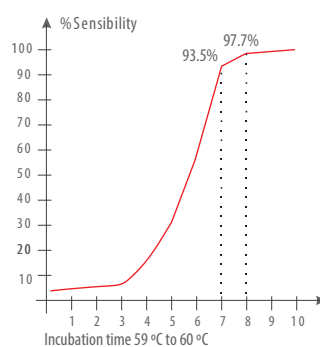
- Positive control before 2 hours.
- Final readout in 8 hs of incubation.
- No need of reconfirmation as other methods.
- Simple incubation with no need of special equipment, avoiding risk of erroneous results.
- Direct reading by simple colour change.
- High sensibility (> 97% at 8 hs.)



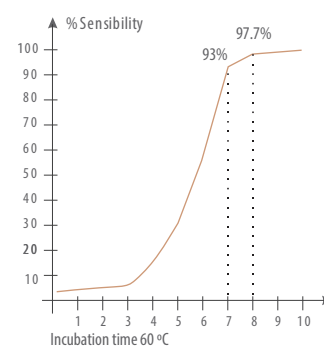
BT90 - VH₂O₂



BT101 - Formaldehyde



BT200 - Steam



Ordering information

Product code	Appearance	Description	Units per package	Packaging
BT10		Self-contained biological indicator for Ethylene Oxide sterilization process. <i>Bacillus atrophaeus</i> (ATCC 9372) 10^6 spores per vial. Readout: 48 hours.	30 or 100	
BT20		Self-contained biological indicator for Steam sterilization process. <i>Geobacillus stearothermophilus</i> (ATCC 7953) 10^5 or 10^6 spores per vial. Readout: 24 hours.	30 or 100	
BT30		Semi self-contained biological indicator for Dry Heat sterilization process. <i>Bacillus atrophaeus</i> (ATCC 9372) 10^6 spores per vial. Each box of 50 tubes allows 25 detections: 1 spore tube + 1 culture medium tube. Readout: 48 hours.	50	
BT80		Self-contained biological indicator for Moist Heat decontamination process. <i>Bacillus atrophaeus</i> (ATCC 9372) 10^4 spores per vial. Readout: 48 hours.	100	
BT91		Self-contained biological indicator for Hydrogen Peroxide Plasma or Steam sterilization process. <i>Geobacillus stearothermophilus</i> (ATCC 7953) 10^5 or 10^6 spores per vial. Readout: 24 hours.	100	
BT100		Self-contained biological indicator for Formaldehyde sterilization process. <i>Geobacillus stearothermophilus</i> (ATCC 7953) 10^5 or 10^6 spores per vial. Readout: 48 hours.	100	
BT90 F1		Rapid readout colorimetric system: self-contained biological indicator for Hydrogen Peroxide Plasma or Steam sterilization process. <i>Geobacillus stearothermophilus</i> (ATCC 7953) 10^5 or 10^6 spores per vial. Readout: 8 hours.	100	
BT101 F1		Rapid readout colorimetric system: self-contained biological indicator for Formaldehyde sterilization process. <i>Geobacillus stearothermophilus</i> (ATCC 7953) 10^5 or 10^6 spores per vial. Readout: 8 hours.	100	
BT200 F1		Rapid readout colorimetric system: self-contained biological indicator for Steam sterilization process. <i>Geobacillus stearothermophilus</i> (ATCC 7953) 10^5 or 10^6 spores per vial. Readout: 8 hours.	100	

*Every effort has been made to ensure that the information in this flyer is correct at the time of going to press. Products described herein are subject to continuous development and improvement. Terragene® reserves the right to change these at any time. Actual colors may vary.