Terragene®

Innovation in **Ethylene Oxide** sterilization

For Industrial Applications

Rev. 0 | May 2024

Why choose our **Ethylene Oxide** (EO) sterilization products?

In today's demanding industrial environment, maintaining a sterile and pathogen-free space is critical for ensuring product safety, employee well-being, and compliance to strict regulations. Ethylene Oxide (EO) sterilization remains a gold standard method for achieving complete microbial elimination, effectively eradicating bacteria, viruses, spores, and fungi.

This catalog presents a comprehensive range of EO sterilization products designed to cater to the diverse needs of various industries, including the veterinary and pharmaceutical sectors worldwide. Our carefully curated selection encompasses both well-established traditional methods and cutting-edge technological advancements, offering tailored and effective solutions for every application.

This catalog offers:

Fluorescence Biological Indicators:
- **BT110:** Rapid Biological Indicator (BI).
- **MINIBIO:** Compact Fluorescence Auto-reader.
- **IC10/20FR:** Fluorescence Auto-reader.

Conventional Biological Indicators:
- **BT10:** Conventional Biological Indicator.
- **BT40:** Spore strip.
- **MC1030:** Culture medium.
- **IC10/20:** Dual Incubator.

Chemical Indicators:
- **CD16:** Multi-variable Chemical Indicator.
- **IT12:** Integrator Indicator.
- **CD17:** Self-adhesive label indicator.
- **CT10:** Type 1 tape.

Wanna know more?

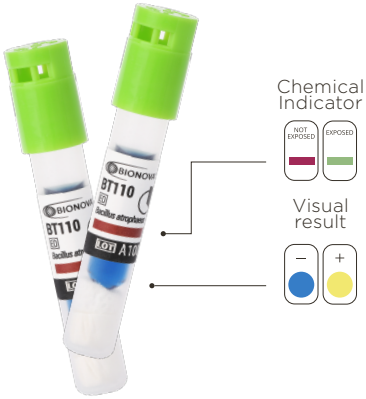
Rapid Biological Indicator (BI)

In industries like pharmaceuticals and veterinary medicine, ensuring complete sterilization is paramount. Contamination from even a single surviving microorganism can have devastating consequences. That's why leading manufacturers rely on the gold standard for sterilization verification: Biological Indicators.

BT110 BIs offer a direct measure of a sterilization cycle's lethality. They use highly resistant bacterial spores, specifically *Bacillus atrophaeus* ATCC® 9372. These spores represent the most challenging microorganisms to remove, ensuring a true test of the sterilization process' effectiveness.

BT110

4h
Rapid Readout



This unmatched accuracy minimizes the risk of product contamination and potential delays due to product recalls. BT110 empowers you to streamline your workflow with complete confidence, knowing your products meet the strictest sterility requirements for pharmaceutical and veterinary applications.

ATCC® is a registered trademark of American Type Culture Collection. The identity, purity, or authenticity of Terragene products are their exclusive responsibility; ATCC® has no liability for them.

MiniBio Auto-reader

IC10/20FR Auto-reader

Auto-readers main features

Dual temperature System (37 °C | 60 °C)	✓	✓
Compact design	✓	✗
Compatible with Bionova® Cloud	✓	✓
USB port	✓	✓
Ethernet connection	✗	✗
Interpretation of results	**LEDs**	**LEDs**
Number of simultaneous incubation programs	**3**	**12**
FDA Cleared	✓	✓

Conventional Biological Indicator

These indicators stands as your ultimate assurance of sterilization efficacy. Rigorously tested against the most resistant microorganism to the sterilization conditions, offering seamless monitoring and ensuring flawless execution of each step in your Ethylene Oxide process.

BT10 is a Self-Contained Biological Indicator (SCBI) designed for easy monitoring of Ethylene Oxide sterililzation processes.

IC10/20 Dual Incubator

The Bionova® IC10/20 dual incubator is designed for a wide range of products, making it a versatile solution for your sterilization needs. It features preset temperatures at 37 °C or 60 °C, ensuring optimal incubation conditions for various biological indicators and monitoring systems.

Spore strip & Culture medium

The BT40 is your go-to solution for meticulously monitoring sterilization processes in industrial settings. This spore strip Biological Indicator features highly resistant bacterial spores *Bacillus atrophaeus* ATCC® 9372 sealed within a specially designed envelope, ensuring precise testing of your Ethylene Oxide and Dry Heat cycles.

BT40

48h

After sterilization, simply test the BT40 with a suitable culture medium like our Bionova® MC1030-2 and expect definitive results within just 48 hours. This combination provides the ideal environment for microorganism development, giving you the peace of mind that your sterilization processes are under control and compliant with industry standards.

MC1030-2

Visual result

Multi-variable Chemical Indicator

Eliminate doubt in your Ethylene Oxide (EO) sterilization process. CD16, our innovative Chemical Process Indicator, guarantees peace of mind. Its clear color change confirms exposure to critical sterilization conditions, ensuring complete elimination of harmful microorganisms.
This translates to uncompromised safety for your industrial applications.

Initial color
Failure
Correct
Failure
Correct
Failure

Integrator Indicator

IT12 (Type 5 according to ISO 11140-1:2014 standard) is a two-level indicator: **Level 1** is the exposure level, which indicates exposure to Ethylene Oxide, while **Level 2** is the integration level. This indicator mimics the death curve of a theoretical *Bacillus atrophaeus* spore population.

Initial color
Unsafe
Safe
Unsafe
Safe
Unsafe

Self-adhesive label indicator

The CD17 is a Type 1 Chemical Indicator specifically designed for monitoring Ethylene Oxide sterilization processes. This self-adhesive label features a precision-printed indicator dot, measuring 15mm in diameter, that transitions from pink to orange for clear and easy monitoring.

Furthermore, we prioritize safety by guaranteeing a 100% toxic heavy metals-free composition, ensuring peace of mind during the sterilization process.

Initial color
Failures
Correct

Type 1 Tape

Step up your sterilization process with the CT10 Indicator Tape. This self-adhesive tape features precision-printed ink that transitions from orange to green, providing a clear and immediate visual confirmation of sterilization completion.

Generously sized at 50m x 18mm, the CT10 ensures ease of use and reliability in every application. Additionally, it's 100% free from toxic heavy metals, prioritizing safety throughout the sterilization process.

Unexposed
Accepted exposure

terragene.com

terragene.com