



Sterilization of the Gx RTF[®] Syringes

Improved and more sustainable RTF process step



Ethylene Oxide
Emissions
Significantly Reduced

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Sustainability in focus: Emissions significantly reduced

With our sterile Gx RTF® syringes, we are regarded as the technology leader with more than 20 years of production experience. We wash, siliconize, assemble with needle shield or tip cap and sterilize Gx RTF® syringes with ethylene oxide (EtO), which means that they are delivered completely prepared for aseptic filling. Together with our service provider Sterigenics*, a leading global provider of out-sourced terminal sterilization services, we have taken voluntary innovative steps in 2021 to reduce ethylene oxide usage by about 45%, thereby reducing fugitive emissions of ethylene oxide while maintaining the safety of our syringe products.

*Sterigenics is a registered trademark of Sterigenics U.S., LLC.



Ethylene oxide sterilization

It is considered the method with the broadest application for medical products due to its effectiveness at lower temperatures and compatibility with a variety of materials. It has become the standard sterilization method in the manufacture of ready-to-fill glass containers. However, when ethylene oxide is used as a sterilizing agent, fugitive emissions may escape and residues may remain on the sterilized products. Due to strict regulation, it is ensured that any residues of the gas or its degradation products are within the permissible limits.

The benefits of reduced ethylene oxide use at a glance

- Continued **safe use of ethylene oxide** as the most widely used sterilization method for primary glass packaging
- **Reduction of required aeration times** and thus resulting in improved customer supply chain efficiencies
- **Maintaining specified residual ethylene oxide** while reducing fugitive emissions and excess residuals
- **Reduction of the CO₂ footprint**

Realizing these potentials will greatly contribute to our goal of improving the sustainability performance of our products for you. It is our utmost concern to achieve this goal together with you.

