



Sterilization Technology Considerations

Each stage in the life cycle of a medical device, pharmaceutical, or commercial product can be extremely challenging.

Our expert advisors can help you navigate key stages of product development, including the selection of the best sterilization technology for your product.

	RADIATION			GAS	
	Gamma	E-Beam	X-Ray	EO	NO ₂
Product Penetration	High	Low	High	High	Low
Tolerance for Density Inhomogeneity	High	Low	High	Medium	Low/Medium
Treatment Processing Time	Hours	Minutes	Hours	Hours/Days	Hours
Material Compatibility	Medium	Medium	Medium	High	Medium
Sustainability	High	Medium	Low	Medium/Low	High
Processing Temperature*	22° – 45°C	22° – 60°C	22° – 45°C	25°C – 55°C	10°C – 30°C
Maintenance Down Time	Low	High	High	Medium	Medium

*For all technologies, some level of cold chain is possible e.g. radiation sterilization may occur under deep-frozen condition.

Sterigenics is a leading global provider of outsourced terminal sterilization services for the medical device, pharmaceutical, food safety and advanced applications markets. With our industry recognized expertise, we help to ensure the safety of millions of patients around the world every year. Across our 48 global facilities, we offer our customers a comprehensive array of sterilization technologies including Gamma, Electron Beam, X-Ray, Ethylene Oxide (EO), and Nitrogen Dioxide (NO₂) sterilization. We are committed to addressing the growing need for sterilization across the world and partnering with our customers to eliminate threats to human health.

Learn more about Sterigenics at sterigenics.com

We're here to help start your project today!

