



Convenient and Low-Cost Gamma Sterilization Services



Specializing in Small Product R&D with Our Small Volume Gamma Irradiator (6-inch D x 8-inch H)

- Convenient scheduling
- Quick turn-around
- Uniform sterilization dose
- Superior material penetration
- NIST traceable dosimetry
- Electronic component specialization

VPT Rad provides convenient and low-cost gamma sterilization for small product R&D, such as for the sterilization needs in biomedical product development cycles, as well as for packaging and other materials.

Ionizing gamma irradiation is a simple and proven process for the safe, reliable and effective sterilization of biomedical devices. Our facility is optimized to provide flexible scheduling and quick turn-around for the unique needs of R&D facilities or prototype projects.

Additionally, as radiation electronics specialists, our electronics testing and radiation knowledge combine to uniquely service small product sterilization needs of the biomedical implantable and biorobotics markets.

The Process

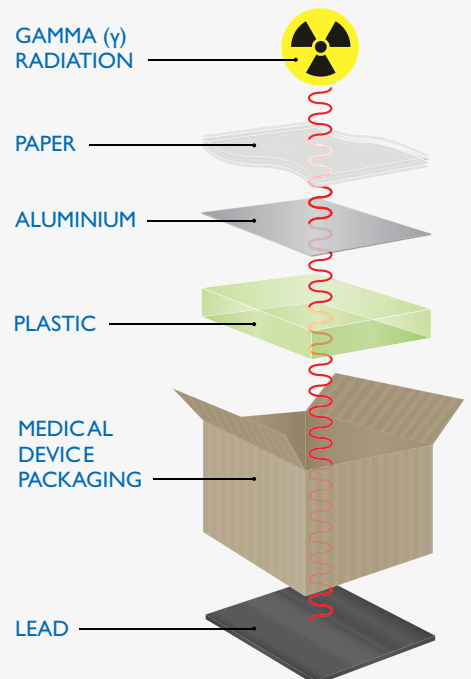
Gamma sterilization is an environmentally preferred option that has been utilized in the medical manufacturing industry for over 40 years. Gamma photons penetrate deeply into material to destroy any microbes present and provide a uniform sterilization dose throughout the volume of material, including materials sealed in final packaging.

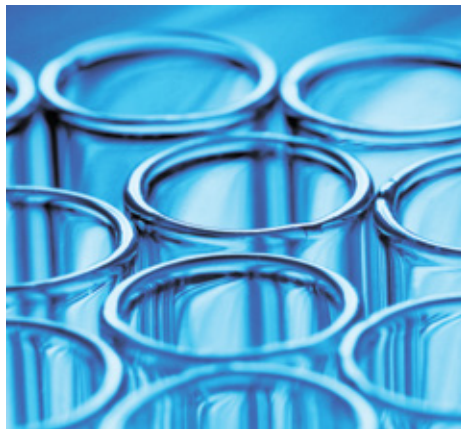
To validate the sterilization dose, an accurate measurement of radiation exposure is crucial. VPT Rad provides accurate radiation dose measurements using a calibrated dosimetry system traceable to NIST (National Institution of Standards Technology).

In addition, VPT Rad's sterilization process meets the radiation dosimetry standards put forth by the American National Standards Institute (ANSI) and the American Society for Testing and Materials (ASTM).

Benefits of Gamma Sterilization:

- Thorough penetration
- Does not degrade or damage materials
- Simple processing
- Short cycle time
- Compatible with most materials
- Competitive cost





The VPT Rad Cobalt-60 gamma irradiator provides a uniform field of high energy and high dose rate gamma photons inside a cylindrical sample volume of 3700cc (225 in³). A typical sterilization dose is achieved in a few hours or less.

Total Ionizing Dose (TID) Gamma Irradiation:

- Sterilization of biomedical devices for single use, research and prototype applications
- High energy gammas for uniform dose
- 3700 cc (225 in³) sample volume
- Quality assurance program
- NIST traceable dosimetry
- Convenient scheduling
- Rapid processing

Sterilization Method Quick Comparison Chart			
METHOD	GAMMA RADIATION	CHEMICAL	HEAT/STEAM
ADVANTAGES	<ul style="list-style-type: none"> • Effective • Compatible with most materials • High penetration • Simple processing • Short-cycle time • Competitive cost 	<ul style="list-style-type: none"> • Effective 	<ul style="list-style-type: none"> • Effective • Non-toxic • Inexpensive • Short cycle time
DISADVANTAGES	<ul style="list-style-type: none"> • Incompatible with some materials 	<ul style="list-style-type: none"> • Some methods toxic, requiring aeration • Complex processing • Cycle times can be long • Incompatible with some materials • Costly 	<ul style="list-style-type: none"> • Requires high heat • Incompatible with many materials

About VPT Rad:

VPT Rad is a certified radiation laboratory and testing services facility that is conveniently located in Chelmsford, Massachusetts, which is less than one hour northwest of Boston. We are a division of VPT, Inc., which is part of the HEICO Electronic Technologies Group.

Our management team has over 85 years of combined experience involving radiation facilities operation, dosimetry and radiation hardened electronics testing. Attention to detail, maintaining test data integrity, and an absolute focus on customer service are just a few of the reasons our valued customers choose to partner with us.

Additionally, VPT Rad has a federally approved quality assurance program for the irradiation and testing of electronic devices.

Contact VPT Rad for specialized and convenient gamma sterilization services:

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