

Product

GEX PRODUCT NUMBER	PRODUCT NAME
P5000	Heat-treatment system for B3 film (Microincubator)

Components: *All weights are approximate

GEX P/N	PRODUCT NAME	MATERIALS	WEIGHT
P4900	SciGene Hybex Microincubator	Metal with plastic lid	2.4 kg (5.3 lbs.)
P4900-HB	Heat Block	Aluminum	0.5 kg (4.9 lbs.)
P4901	Digi-Sense Digital Thermometer and K-Type Thermocouple Probe with NIST-traceable calibration certificate (certified by InnoCal by Cole Parmer)	Plastic with metal probe	0.2 kg (0.4 lb.) Thermometer 0.03 kg (0.07 lb.) Probe
P4801	Digital Timer (visual alarm timer)	Plastic	0.1 kg (0.2 lb.)



P5000 Product Assembly

Product Description

The *Heat-treatment System for B3 Film Dosimeters* is a microincubator that heat-treats B3 film dosimeters evenly and quickly. The System is designed to heat-treat GEX B3 dosimeters in the original pouch.

Intended use

The System is designed to heat-treat B3 film dosimeters in the pouch after irradiation. This System is a faster way to heat-treat B3 dosimeters compared to a traditional convection or forced-air incubator, has a small footprint, and is designed to meet the needs of B3 dosimetry in an industrial radiation processing facility.

Product Requirements

- **Environmental:** Ambient temperature +15 to +32°C (58 to 90°F), relative humidity 15 to 80%RH non-condensing.
- **Setup:** Minimum of 3 inches (8cm) clearance on all sides for air flow.
- **Electrical:** 115V or 230V AC; 250 Watts



Maintenance

The only recommendations are general good practices for care and cleaning. Do not use petroleum distillates to clean the device. The heat block may be disassembled and cleaned if desired or deemed necessary, but no specific frequency is recommended.

Certification/Warranty

- The System comes with a Factory Acceptance Test certificate.
- Warranty policy – Download product sales [Terms & Conditions](#) from the GEX website for warranty information.

Calibration/Qualification

Calibration	• The Microincubator's Watlow temperature controller should be calibrated annually, or according to the user's internal process requirements. • The digital thermometer and thermocouple probe should be recalibrated according to the NIST-traceable calibration certificate that comes with the thermometer. • The digital timer should be recalibrated according to the NIST-traceable calibration certificate that comes with the timer or replaced every 2 years.
Qualification	The customer must determine if this product requires qualification prior to use, based on internal process requirements.

Cautions/Safety

- Do not heat-treat more than one pouch per slot in the heat block. Maximum 18 pouches in one incubator at a time.
- Do not place bare film or dosimeters removed from the pouch into the heat block. The B3 film may melt and stick to the interior of the block.
- The surface of the heat block is very hot (about 60°C) during operation. Keep the incubator lid closed when not in use to prevent accidental contact.
- The aluminum heat block should always be kept inside the incubator cavity and should only be removed for periodic cleaning or servicing.
- To remove the heat block, turn off the power to the incubator unit and allow the block to cool to room temperature before handling. This may take several hours.

Related Documents

View/download product-related documents and qualification procedures the document library <https://library.gexcorp.com> and GEX knowledgebase <https://gex-help-center.scroll.site>. Search by product name, document title, or keyword.

Heat-Treatment Incubator Qualification	Heat-Treatment Incubator Qualification Procedure and Form. Use with Incubator Calibration and Temperature Mapping Form.
Post-Irradiation Heat Treatment of B3 Dosimeter Products – Technical Report	In-depth discussion of the post-irradiation heat treatment of B3 film dosimeters.

Shipping/Delivery

Country of origin	U.S.A.
Temperature controls or monitoring required?	None required.

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