



Sterility Assurance Product Guide

Africa, Asia, Australia, North and South America





Thank you for choosing Mesa Labs as your partner in sterility assurance.

This product guide includes a detailed selection of sterilization indicators, accessories and services to ensure the utmost safety and efficacy of healthcare-related products.

All of our products and services help maintain critical environments for hospitals, pharmaceutical and medical device manufacturers, blood banks, laboratories, pharmacies and industrial facilities. Mesa has over 35 years of experience in material compatibility, sterilization science, validation approaches and cycle optimization, and we will work with you to make sure your unique sterilization requirements are being met.

As we remain committed to our purpose of protecting the vulnerable, let us know how we can help you provide greater control in your sterility program.

A handwritten signature in blue ink, appearing to read "Gary M. Owens". The signature is fluid and cursive, with a long horizontal stroke at the end.

Gary M. Owens
President and CEO

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Biological Indicators

Biological indicators (BIs) contain viable microorganisms that provide a defined resistance to a specified sterilization process.

Trusted by hospitals, pharmaceutical and medical device manufacturers, ambulatory surgical centers, dentists and more, BIs enable validation and verification of a sterilization cycle.

The CDC recognizes BIs to be ideal sterilization monitors that should be used in conjunction with mechanical and chemical indicators.

Dry Heat Sterilization

One of the earliest forms of sterilization practiced, dry heat sterilization is accomplished by conduction, where heat is absorbed by the exterior surface and passed inward to the next layer. Dry heat sterilization is ideal for heat-stable items such as glass, stainless steel, non-aqueous liquids, powders, etc. The essential cell components are destroyed and the organism is killed by oxidizing molecules.



CHEMICAL INDICATORS - DRY HEAT

Classification: Dry Heat - Type 4

Item	Part Number	Packaging
DryChecks Strips	DRY CHECKS STRIPS	250/bag
Indicator Labels (Dry Heat) 510(k) Cleared at 160°C	CI-DHI	1,000/roll

INDUSTRIAL USE BIS AND CULTURE MEDIA

Population: 10⁶ • ATCC Number: 9372

Item	Part Number	Packaging
Cotton Thread: 19 x 1.5 mm <i>B. atrophaeus</i>	1-6100TT	100/package in Tyvek/Mylar
Paper Discs: 6 mm <i>B. atrophaeus</i>	1-10006mm 1-61006mm	1000/bulk 100/package

DRIAMP CULTURING KIT

Population: 10⁶ • ATCC Number: 9372

Item	Part Number	Packaging
DriAmp Biological Indicator Culturing Set	DH/50	Box of 50 DriAmp ampoules with 50 Releasat® media tubes

DRIAMP CULTURING MEDIA

Item	Part Number	Packaging
Releasat® Media with Phenol Red for EtO/Dry Heat/ClO ₂ 3.6 ml Fill Volume in 16 x 100 mm Tubes	RG/100	100/box

Dry Heat Sterilization

MESA STRIPS

MESAstrip contain bacterial spores on a paper carrier sealed within a convenient, peel-open envelope.

Population: 10^6 • ATCC Number: 9372

Dimensions: Strip 0.25 x 1.0 in., glassine envelope 1.03 x 3.0 in.

Item	Part Number	Packaging
<i>B. atrophaeus</i>	SGMG/6	100/bag

MICRO STRIPS

Micro Strips can be used in areas where other BIs are too large.

Population: 10^6 • ATCC Number 9372

Item	Part Number	Packaging
1 x 25 mm <i>B. atrophaeus</i>	A1X25/6	100/package, bulk
	A1X25/6G	In glassine, 100/package
2 x 10 mm <i>B. atrophaeus</i>	A2X10/6	100/package, bulk
	A2X10/6G	In glassine, 100/package



Custom BIs are also available. Contact Customer Service for more information.

SPORE STRIPS

Spore Strips are inoculated with bacterial spores on a paper carrier sealed within a convenient, peel-open glassine envelope.

Dimensions: Strip 0.25 x 1.5 in., glassine envelope 1.03 x 3.0 in.

Item	Part Number	Packaging	Population	ATCC Number
<i>B. atrophaeus</i>	1-6100	100/bag		
	1-6500	500/bag	10 ⁶	9372
	1-1000	1000/bag		
Spore Strip Combined: Test <i>B. atrophaeus</i> & <i>G. stearothermophilus</i>	5-1000T	1000/bag		
Spore Strip Combined: Control <i>B. atrophaeus</i> & <i>G. stearothermophilus</i>	5-1000C	1000/bag	10 ⁶ / 10 ⁵	9372 & 7953
Spore Strip Combined <i>B. atrophaeus</i> & <i>G. stearothermophilus</i>	5-5100	100/bag		

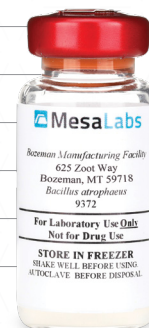


SPORE SUSPENSIONS

Spore Suspensions are calibrated suspensions of bacterial spores appropriate for direct inoculation of products or customers choice of substrate for monitoring dry heat and EtO sterilization processes.

ATCC Number: 9372 • Diluent: 40% ethanol • Packaging: 10 ml vial

Item	Part Number	Population
<i>B. atrophaeus</i>	SSGE/4	10 ⁴ / 0.1 ml
	SSGE/5	10 ⁵ / 0.1 ml
	SSGE/6	10 ⁶ / 0.1 ml
	SSGE/7	10 ⁷ / 0.1 ml
	SSGE/8	10 ⁸ / 0.1 ml



Ethylene Oxide (EtO) / Gas Sterilization

EtO sterilization is one of the most common sterilization methods for medical device manufacturing including specialty device kits used for surgical procedures. The chemical process consists of four primary variables: gas concentration, humidity, temperature, and time. EtO is an alkylating agent that disrupts the DNA of microorganisms, which prevents them from reproducing.



EZTEST

EZTests are self-contained BIs that contain bacterial spores on a paper carrier, packaged within a small, thermoplastic culture tube with a sealed-glass ampoule. The specially-formulated soybean casein digest culture medium contains a color indicator, which turns a dramatic yellow when spores grow. Visual results within 24 hours (steam or H₂O₂) or 48 hours (EtO).

Population: 10⁶ • ATCC Number: 9372

Item	Part Number	Packaging
<i>B. atrophaeus</i>	EZG/6	100/box
510(k) Cleared	EZG/625	25/box

INDUSTRIAL USE BIS

Population: 10⁶ • ATCC Number: 9372

Item	Part Number	Packaging
Cotton Thread: 19 x 1.5 mm <i>B. atrophaeus</i>	1-6100TT	100/package in Tyvek/Mylar
Paper Discs: 6 mm <i>B. atrophaeus</i>	1-10006mm	1000/bulk
	1-61006mm	100/package

MESASTRIPS

MESASTrips contain bacterial spores on a paper carrier sealed within a convenient, peel-open envelope.

Dimensions: Strip 0.25 x 1.0 in., glassine envelope 1.03 x 3.0 in.

Population: 10⁶ • ATCC Number: 9372

Item	Part Number	Packaging
MESAStrip for EtO/Dry Heat <i>B. atrophaeus</i>	SGMG/6	100/bag

MEDIA AND KITS

Item	Part Number	Population	ATCC Number	Packaging
Releasat® Biological Indicator Culturing Set for EtO	RG/100	10 ⁶	9372	Box of 100 MESASTrips with 100 Releasat media tubes
Releasat® Media with Phenol Red for EtO/Dry Heat/ClO ₂ 3.6ml Fill Volume in 16 x 100 mm Tubes	RM/100	N/A	N/A	100/box
Tryptic Soy Broth with Bromocresol Purple 16 mm Tubes	TSB-BP16	N/A	N/A	100/box

MICRO STRIPS

At 2 x 10 mm or 1 x 25 mm, Micro Strips can be used in areas where other BIs are too large.

Population: 10⁶ • ATCC Number: 9372

Item	Part Number	Packaging
Micro Strips: 1 x 25 mm <i>B. atrophaeus</i>	A1X25/6	100/package, bulk
	A1X25/6G	In glassine, 100/package
Micro Strips: 2 x 10 mm <i>B. atrophaeus</i>	A2X10/6	100/package, bulk
	A2X10/6G	In glassine, 100/package



Consistent and proper use of BIs help prevent healthcare-acquired infections. Mesa's accredited third-party lab can augment or fully support your sterility program.

EtO Sterilization

SPORE STRIPS

Spore Strips are inoculated with bacterial spores on a paper carrier sealed within a convenient, peel-open envelope.

Dimensions: Strip 0.25 x 1.5 in., glassine envelope 1.03 x 3.0 in.

Item	Part Number	Population	ATCC Number	Packaging
<i>B. atrophaeus</i>	1-6100	10 ⁶	9372	100/bag
	1-6500	10 ⁶	9372	500/bag
	1-1000	10 ⁶	9372	1000/bag
Spore Strip Combined: Test <i>B. atrophaeus</i> & <i>G. stearothermophilus</i>	5-1000T	10 ⁶ / 10 ⁵	9372 & 7953	1000/bag
Spore Strip Combined: Control <i>B. atrophaeus</i> & <i>G. stearothermophilus</i>	5-1000C	10 ⁶ / 10 ⁵	9372 & 7953	1000/bag
Spore Strip Combined <i>B. atrophaeus</i> & <i>G. stearothermophilus</i>	5-5100	10 ⁶ / 10 ⁵	9372 & 7953	100/bag



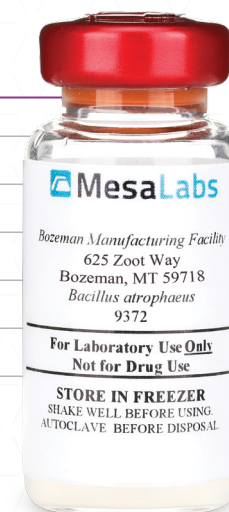
SPORE SUSPENSIONS

Spore Suspensions are calibrated suspensions of bacterial spores appropriate for direct inoculation of products or customers choice of substrate for monitoring dry heat and EtO sterilization processes.

Packaging: 10 ml vial

ATCC Number: 9372 • Diluent: 40% ethanol

Item	Part Number	Population
<i>B. atrophaeus</i>	SSGE/4	10 ⁴ / 0.1 ml
	SSGE/5	10 ⁵ / 0.1 ml
	SSGE/6	10 ⁶ / 0.1 ml
	SSGE/7	10 ⁷ / 0.1 ml
	SSGE/8	10 ⁸ / 0.1 ml



Process Challenge Devices (PCDs)

Mesa PCD® Technology products consist of commercial spore strips, discs or self-contained BIs in a proprietary EtO barrier pouch. For greater efficiency, PCDs packaged with self-contained biological indicators, enable you to see the results, without waiting for multi-day incubation periods or sending the indicator to the lab for results.

BARE BI PCDS

Part Number	BI Manufacturer	BI Type	Packaging
PCD 0.6	3M	Attest™ Self-Contained BI	300/package
PCD 09		Attest Rapid Readout BI	300/package
1-10006mm	MESA	BI Disc, 1-10006mm	1000/package
1-61006mm		BI Disc, 1-10006mm	100/package
EZG/6		EZTest Self-Contained BI	100/package
PCD 0.7	Steris	Spore Strip in Glassine	500/package

To learn more about Mesa PCD® Technology,
download the PCD Selection Guide at
info.mesalabs.com/PCDselect

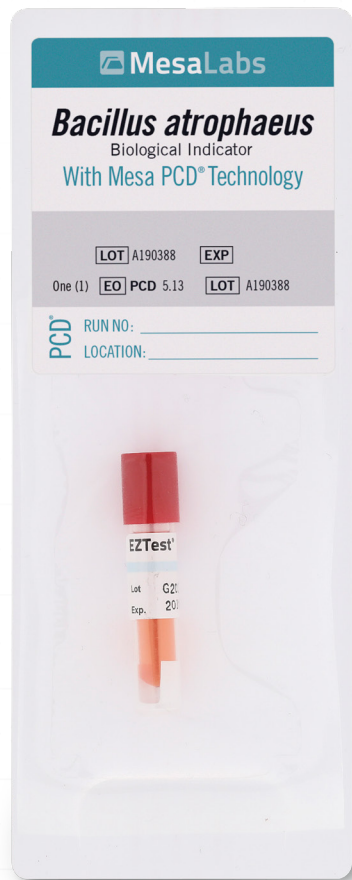


EtO Sterilization

STANDARD PCDS

Packaging: 100

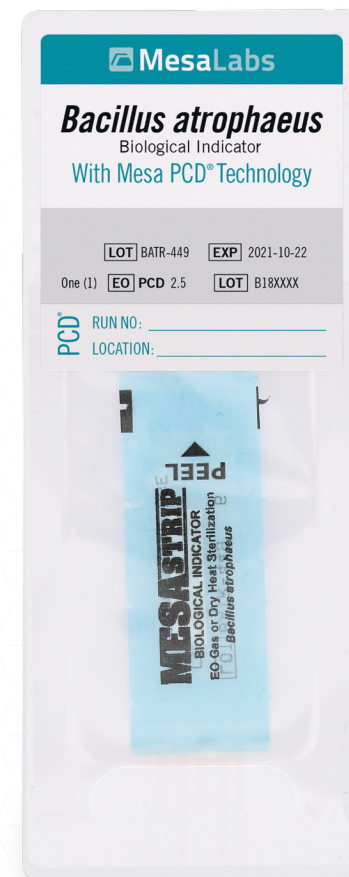
Part Number	BI Manufacturer	BI Type	Nominal D-Value
Type 3 - Least Resistance			
PCD 3.13	MESA	EZTest Self-Contained BI	3
PCD 3.2	Steris	Spore Strip without Glassine	3
PCD 3.5	MESA	Spore Strip in Glassine	4
PCD 3.6	3M	Attest Self-Contained BI	5
PCD 3.9	3M	Attest Rapid Readout BI	5
Type 5 - Low Resistance			
PCD 5.1	MESA	BI Disc, 1-10006mm	4
PCD 5.13	MESA	EZTest Self-Contained BI	13
PCD 5.2	Steris	Spore Strip without Glassine	4
PCD 5.5	MESA	Spore Strip in Glassine	6
PCD 5.62	3M	Attest Self-Contained BI	13
PCD 5.92	3M	Attest Rapid Readout BI	13
Type 4 - Medium Resistance			
PCD 4.1	MESA	BI Disc, 1-10006mm	21
PCD 4.13	MESA	EZTest Self-Contained BI	50
PCD 4.19	MESA	Mini Spore Strip in Glassine	32
PCD 4.2	Steris	Spore Strip without Glassine	21
PCD 4.5	MESA	Spore Strip in Glassine	32
PCD 4.6	3M	Attest Self-Contained BI	50
PCD 4.7	Steris	Spore Strip in Glassine	32
PCD 4.9	3M	Attest Rapid Readout BI	50



STANDARD PCDS

Packaging: 100

Part Number	BI Manufacturer	BI Type	Nominal D-Value
Type 6 - Medium Resistance			
PCD 6.1	MESA	BI Disc, 1-10006mm	12
PCD 6.13	MESA	EZTest Self-Contained BI	35
PCD 6.2	Steris	Spore Strip without Glassine	12
PCD 6.5	MESA	Spore Strip in Glassine	17
PCD 6.6	3M	Attest Self-Contained BI	35
PCD 6.7	Steris	Spore Strip in Glassine	17
PCD 6.9	3M	Attest Rapid Readout BI	35
Type 7 - Medium Resistance			
PCD 7.1	MESA	BI Disc, 1-10006mm	9
PCD 7.13	MESA	EZTest Self-Contained BI	26
PCD 7.2	Steris	Spore Strip without Glassine	9
PCD 7.5	MESA	Spore Strip in Glassine	14
PCD 7.6	3M	Attest Self-Contained BI	26
PCD 7.7	Steris	Spore Strip in Glassine	14
PCD 7.9	3M	Attest Rapid Readout BI	26
Type 2 - Most Resistance			
PCD 2.1	MESA	BI Disc, 1-10006mm	28
PCD 2.12	MESA	Spore Strip without Glassine	28
PCD 2.13	MESA	EZTest Self-Contained BI	58
PCD 2.2	Steris	Spore Strip without Glassine	28
PCD 2.5	MESA	Spore Strip in Glassine	37
PCD 2.6	3M	Attest Self-Contained BI	58
PCD 2.7	Steris	Spore Strip in Glassine	37
PCD 2.9	3M	Attest Rapid Readout BI	58



Specialty Sterilization Processes

Mesa offers BIs for specialty sterilization processes, including chlorine dioxide (ClO₂), gamma irradiation and hydrogen peroxide (H₂O₂).



Chlorine Dioxide (ClO₂) Sterilization

Chlorine dioxide, known for producing less harmful byproducts than chlorine, is commonly used as a sterilizer, oxidizer or disinfectant. It efficiently kills pathogenic microorganisms and spore-forming bacteria but also prevents and removes bio film.

MEDIA

Item	Part Number	Packaging
Releasat® Media with Phenol Red for EtO/Dry Heat/ClO ₂ 3.6 ml Fill Volume in 16 x 100 mm Tubes	RM/100	100/box

MESASTRIP

MesaStrip contains bacterial spores on a filter paper carrier sealed within a convenient, peel-open envelope.

Dimensions: Strip 0.25 x 1.0 in., glassine envelope 1.03 x 3.0 in.
Population: 10⁶ • ATCC Number: 9372

Item	Part Number	Packaging
<i>B. atrophaeus</i> - in Tyvek/Mylar	ACD/6	100/bag

Ozone (O₃) Sterilization

SPORE STRIPS

Spore Strips are contained in Tyvek envelopes.

ATCC Number: 9372 • Packaging: 100/package

Item	Part Number	Population
	AOZ/3T	10 ³
<i>B. atrophaeus</i>	AOZ/4T	10 ⁴
	AOZ/6T	10 ⁶

Gamma Irradiation Sterilization

Exposing products to a Cobalt 60 radiation field. Gamma irradiation is known for its quick turnaround times, easy penetration of packaging and is ideal for many types of materials.



INDUSTRIAL USE BIS

Item	Part Number	Population	ATCC Number	Packaging
Stainless Steel Disc: 7 mm - <i>B. pumilus</i>	DPSS/3	10 ³	27142	100/package in clear plastic
	DPSS/6C	10 ⁶	27143	100/package in clear plastic

SPORE SUSPENSIONS

Spore Suspensions are calibrated suspensions of bacterial spores appropriate for direct inoculation of products or customers choice of substrate for monitoring gamma irradiation processes.

Packaging: 10 ml vial

ATCC Number: 27142 • Diluent: 40% ethanol

Item	Part Number	Population
<i>B. pumilus</i>	SSRE/4	10 ⁴ / 0.1 ml
	SSRE/5	10 ⁵ / 0.1 ml
	SSRE/6	10 ⁶ / 0.1 ml
	SSRE/7	10 ⁷ / 0.1 ml
	SSRE/8	10 ⁸ / 0.1 ml

MESA STRIP

MesaStrips contain bacterial spores on a paper carrier sealed within a convenient, peel-open envelope.

Dimensions: Strip 0.25 x 1.0 in., glassine envelope 1.03 x 3.0 in.

ATCC Number: 27142

Item	Part Number	Population	Packaging
<i>B. pumilus</i>	SGMR/6	10 ⁶	100/bag
	SGMR/7	10 ⁷	100/bag

Hydrogen Peroxide (H₂O₂) Sterilization

APEX

APEX BI products are designed specifically for the pharmaceutical, food and medical device industries, utilizing H₂O₂ vapor sterilization. The stainless steel carrier is used in multiple processes including isolators, misting, fogging and filling line applications.

Item	Part Number	Population	ATCC Number	Packaging
Stainless Steel Discs in Tyvek/Tyvek <i>B. atrophaeus</i> - 9 mm Diameter	GRS-090E3	10 ³	9372	100/package
	GRS-090	10 ⁶	9372	100/package
Stainless Steel Discs in Tyvek/Tyvek <i>G. stearothersophilus</i> - 9 mm Diameter	HMV-091E3	10 ³	12980	100/package
	KCD-404	10 ⁴	12980	100/package
	HMV-091	10 ⁶	12980	100/package
Bare Metal BI Stainless Steel Ribbon <i>G. stearothersophilus</i> - 6 x 80 mm	SBC-327	10 ⁶	12980	100/package
Tri-Scale BI; Tyvek Package BI with 10 ⁴ , 10 ⁵ and 10 ⁶ Stainless Steel Carriers <i>G. stearothersophilus</i> - 9 mm Diameter	LOG-456	10 ⁴ , 10 ⁵ , 10 ⁶	12980	50/package
Stainless Steel Discs in Tyvek/Tyvek <i>G. stearothersophilus</i> - 9 mm Diameter	NAS-152E3	10 ³	7953	100/package
	NAS-152	10 ⁶	7953	100/package
Sterile Tyvek Transfer Pockets for SBC-327	BMWK-750	N/A	N/A	100/package
Spore Suspension for Gaseous Hydrogen Peroxide - <i>G. stearothersophilus</i>	LAU-196	10 ⁷ / 0.1 ml	12980	10 ml vial
	LPT-606	10 ⁷ / 0.1 ml	7953	10 ml vial
Releasat Purple Media, for Use with <i>G. stearothersophilus</i> Products 3.6ml Fill Volume in 16 x 100 mm Tubes	PM/100	N/A	N/A	100 units



STERRAD® H₂O₂

The STERRAD® H₂O₂ sterilization cycle is a low-temperature process that uses hydrogen peroxide gas plasma technology for sterilization. The process provides gentle sterilization for delicate instruments in about an hour or less. Temperatures do not exceed 50°C, and sterilization occurs in a low moisture environment.



EXPOSURE™

ExpoSure is a BI intended for use in the STERRAD Sterilizer. ExpoSure has received its 510(k) clearance making it suitable for healthcare and non-healthcare settings. Its 24-hour incubation time and flexibility make it a powerful tool to help your facility maintain compliance and patient safety. ExpoSure can be used in conjunction with existing incubators (55-60°C).

Population: 10⁶ • ATCC Number: 7953

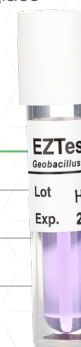
Item	Part Number	Packaging
<i>G. stearothermophilus</i> 510(k) Cleared	EXPO/6	30 indicators per box; 1 crusher

EZTEST

EZTests are self-contained BIs that contain bacterial spores on a stainless steel disc, packaged within a small, thermoplastic culture tube with a sealed-glass ampoule, specially-formulated soybean casein digest culture medium containing a color indicator, which turns a dramatic yellow when spores grow. Visual results within 24 hours (steam or H₂O₂) or 48 hours (EtO).

ATCC Number: 7953 • Packaging: 100/box

Item	Part Number	Population
<i>G. stearothermophilus</i>	EZH/5	10 ⁵
	EZH/6	10 ⁶



MESA PCD TECHNOLOGY

PCD patented technology that uses the EZTest H₂O₂ SCBI within a proprietary H₂O₂ barrier pouch.

Nominal D-Value: N/A • Available in quantities of 100

BI Type	Part Number	BI Manufacturer
EZTest EZH/6	PCD 8.13	MESA

Steam Sterilization

Steam is the most common sterilization method due to its nontoxic, inexpensive and sporicidal process properties. Sterilization is achieved by exposing products to saturated steam at high temperatures (from 121 to 135°C) at a required pressure for a specified amount of time. Saturated steam is a biphasic mixture of H₂O in gas and liquid phases in thermal equilibrium. Because of the high heat involved in steam sterilization, it is not appropriate for all materials.



Looking for a custom solution? See page 26 for our custom services and capabilities.



Liquid Loads

The sterilization of liquids is very different from a porous/hard load, as air removal is not critical. Sterilization is dependent upon steam contacting the container which houses the liquid product, therefore relying on the water inside of the product to create a steam environment within the container where the BI should be placed.

AMPOULES FOR STERILIZATION OF LIQUID LOADS

ProSpore, MagnaAmp and SterilAmp II liquid submersible self-contained BIs are ideal for validating the steam sterilization of liquid loads. Simply expose the unit to the sterilization process and incubate afterwards. These indicators are validated for 48-hour reduced incubation. However, SterilAmp II 5230 (Part# SASU/6) is validated for 72-hour incubation. Liquid ampoules are refrigerated and require overnight shipping. See the Accessories page for ProSpore and MagnaAmp incubators.

Item	Part Number	Population	ATCC Number	Packaging
4 ml ProSpore - <i>G. stearothermophilus</i> 510(k) Cleared, 14.75mm x 52mm	PS-4-10	10 ⁴	7953	10/box
	PS-4-50	10 ⁴	7953	50/box
	PS-5-10	10 ⁵	7953	10/box
	PS-5-50	10 ⁵	7953	50/box
	PS-6-50	10 ⁶	7953	50/box
MagnaAmp - <i>G. stearothermophilus</i> 10.6 x 52 mm	MA/4	10 ⁴	7953	50/box plus 10 negative controls
	MA/5	10 ⁵	7953	50/box plus 10 negative controls
	MA/6	10 ⁶	7953	50/box plus 10 negative controls
SterilAmp II - <i>G. stearothermophilus</i> 6.75 x 26.5 mm	SA/4	10 ⁴	7953	100/bag plus 10 negative controls
	SA/5	10 ⁵	7953	100/bag plus 10 negative controls
	SA/6	10 ⁶	7953	100/bag plus 10 negative controls
	SANC			10/box negative controls
SterilAmp II - <i>G. stearothermophilus</i> 18 mm	SA18/5	10 ⁵	7953	100/bag plus 50 negative controls
	SA18/6	10 ⁶	7953	100/bag plus 10 negative controls
	SANC18			10/box negative controls
SterilAmp II 5230 - <i>B. subtilis</i> "5230" Low Temp (110-118°C) 6.75 x 26.5 mm	SASU/6	10 ⁶	35021	100/bag plus 50 negative controls
	SASUNC			10/box negative controls



SPORE SUSPENSIONS

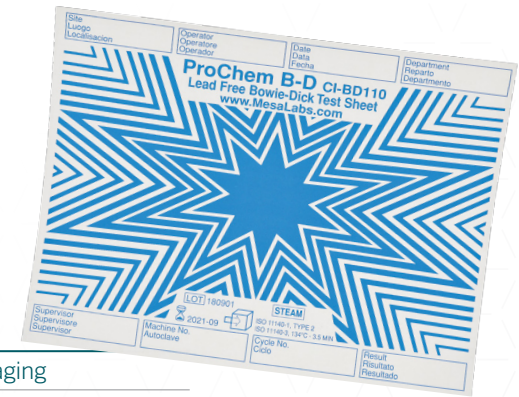
Spore Suspensions are calibrated suspensions of bacterial spores appropriate for direct inoculation of products or customers choice of substrate for monitoring steam, EtO, dry heat, H₂O₂, irradiation and other industrial sterilization processes.

Packaging: 10 ml vial

Item	Part Number	Population	ATCC Number	Diluent
<i>B. subtilis</i> "5230"	SS5230E/4	10 ⁴ / 0.1 ml	35021	40% ethanol
	SS5230E/5	10 ⁵ / 0.1 ml	35021	40% ethanol
	SS5230E/6	10 ⁶ / 0.1 ml	35021	40% ethanol
	SS5230E/7	10 ⁷ / 0.1 ml	35021	40% ethanol
	SS5230A/7	10 ⁷ / 0.1 ml	35021	Aqueous
	SS5230E/8	10 ⁸ / 0.1 ml	35021	40% ethanol
	SSSE/4	10 ⁴ / 0.1 ml	7953	40% ethanol
	SSSE/5	10 ⁵ / 0.1 ml	7953	40% ethanol
<i>G. stearothermophilus</i>	SSSE/6	10 ⁶ / 0.1 ml	7953	40% ethanol
	SSSE/7	10 ⁷ / 0.1 ml	7953	40% ethanol
	SSSA/7	10 ⁷ / 0.1 ml	7953	Aqueous
	SSCS7955/4	10 ⁴	7955	40% ethanol
	SSCS7955/5	10 ⁵	7955	40% ethanol
<i>C. sporogenes</i>	SSCS7955/6	10 ⁶	7955	40% ethanol
	SSCS7955/7	10 ⁷	7955	40% ethanol
	SSCS11437/4	10 ⁴	11437	40% ethanol
	SSCS11437/5	10 ⁵	11437	40% ethanol
	SSCS11437/6	10 ⁶	11437	40% ethanol
	SSCS11437/7	10 ⁷	11437	40% ethanol
	SSCS19404/4	10 ⁴	19404	40% ethanol
	SSCS19404/5	10 ⁵	19404	40% ethanol
	SSCS19404/6	10 ⁶	19404	40% ethanol
	SSCS19404/7	10 ⁷	19404	40% ethanol

Porous/Hard Objects

A porous/hard load refers to the items being sterilized (dry items). These items may be glassware, surgical instruments, syringes, tubing, fabrics, etc.



CHEMICAL INDICATORS AND BOWIE-DICK

Item	Part Number	Classification	Packaging
ProChem BD Air Removal Test Pack	CI-BDTLF	Steam - 510(k) cleared for 3.5 min at 132°C	4 boxes/case (80 packs)
	CI-BDTLF20	Steam - 510(k) cleared for 3.5 min at 132°C	20 packs/box
Bowie-Dick Green Card Test	BD 134	Steam - type 2	30/pack
AutoCheck Kit II Bowie-Dick Test Pack	CI-AUTOCHECK-KIT-II	Steam - type 2	30/pack
Bowie-Dick Check II Lead Free Test Pack	CI-BD-CHECK-II	Steam - type 2	20/pack
Bowie Dick Green Card Test	CI-Greencardt	Steam (pre-vacuum) type 2	15/pack
Blackcheck Multicritical Process Variable Indicator Strips	CI-BLACKCHECK-C	Steam - type 4	250/bag
Steri Vapeur 18 Emulating Chemical Integrator	CI-STERIVAPEUR-18	Steam (pre-vacuum) type 4 & 6 emulating	250/bag
ProChem SSW Moving Front Integrating Indicator	CI-SSW	Steam - Type 5 integrating 510(k) cleared	250/box
Integrgraph Integrating Chemical Indicator	CI-INTEGRAPH	Steam (pre-vacuum) type 5 integrating	250/bag
Chemostrip Emulating Chemical Indicator	CI-CHEMOSTRIP 134°C/121°C	Steam (pre-vacuum) type 6 emulating	250/bag
Bowie Dick Green Card Holder	BD 134 TH	N/A	1



Steam Sterilization

EZTEST

EZTests are self-contained BIs that contain bacterial spores on a paper carrier, packaged within a small, thermoplastic culture tube with a sealed-glass ampoule, specially-formulated soybean casein digest culture medium containing a color indicator, which turns a dramatic yellow when spores grow. Visual results within 24 hours (steam or H₂O₂) or 48 hours (EtO).

ATCC Number: 7953

Item	Part Number	Population	Packaging
<i>G. stearothermophilus</i> - 510(k) Cleared	EZS/5	10 ⁵	100/box
	EZS/525	10 ⁵	25/box
	EZS/6	10 ⁶	100/box
	EZS/625	10 ⁶	25/box
Test Pack <i>G. stearothermophilus</i> - 510(k) Cleared	STP/25	10 ⁵	25 test packs/case with 25 controls

INDUSTRIAL USE BIS

ATCC Number: 7953 • Population: 10⁶

Item	Part Number	Population	Packaging
Paper Discs: 6 mm <i>G. stearothermophilus</i>	DS6R/6	10 ⁶	100/bulk

MEDIA

Item	Part Number	Packaging
Releasat® Media with Bromocresol Purple for Steam 3.6 ml Fill Volume in 16 x 100 mm Tubes	PM/100	100/box
Tryptic Soy Broth with Bromocresol Purple 16 mm Tubes	TSB-BP16	100/box



MESA STRIPS

MESASTrips contain bacterial spores on a paper carrier sealed within a convenient, glassine envelope.

Dimensions: Strip 0.25 x 1.0 in., glassine envelope 1.03 x 3.0 in. • Packaging: 100/bag

Item	Part Number	ATCC Number	Population
	SGMS/3	7953	10 ³
<i>G. stearothermophilus</i>	SGMS/5	7953	10 ⁵
	SGMS/6	7953	10 ⁶
<i>B. subtilis</i> (5230)	SGMSU/6	35021	10 ⁶

MICRO STRIPS

Micro Strips can be used in areas where other BIs are too large.

Population: 10⁶

Item	Part Number	ATCC Number	Packaging
1 x 25 mm	S1X25/6	7953	100/package, bulk
<i>G. stearothermophilus</i>	S1X25/6G	7953	In glassine, 100/package
	S2X10/6	7953	100/package, bulk
2 x 10 mm <i>G. stearothermophilus</i>	S2X10/6G	7953	In glassine, 100/package
	SU1X25/6	35021	100/package, bulk
1 x 25 mm <i>B. subtilis</i> "5230"	SU1X25/6G	35021	In glassine, 100/package

PROLINE PCD

ProLine is a process challenge device (PCD) for use in the validation or monitoring of sterilization cycles of tubing ranging from 3.2 to 15.8 mm inside diameter. ProLine contains a paper disc inoculated with bacterial spores of *G. stearothermophilus* for steam.

ATCC Number: 7953 • Population: 10⁶

Item	Part Number	Packaging
<i>G. stearothermophilus</i>	PL-3-6-15	15/box



Steam Sterilization

SMART-READ EZTEST - FDA 510(K) CLEARED

The Smart-Read® EZTest® Biological Monitoring System allows an organization to release sterile product with true biological confirmation faster and easier than ever before. This unique system uses a real BI – with no added enzyme or chemical integrator – which is incubated, evaluated and documented in one simple, automated operation. Relying only upon bacterial spore growth, the Smart-Read system can detect sterilization failure in as few as three to five hours, and negative results can be confirmed with ten hours of incubation.

ATCC Number: 7953

Item	Part Number	Population	Packaging
<i>G. stearothermophilus</i>	SEZS/5		100 count
<i>G. stearothermophilus</i>	SEZS/525	10 ⁵	25 count
Smart-Read EZTest Steam Test Pack	SRSP/25		25 test packs/case with 25 controls
<i>G. stearothermophilus</i>	SEZS/6		100 count
<i>G. stearothermophilus</i>	SEZS/625	10 ⁶	25 count
Smart-Read EZTest Steam Test Pack	SRSP6/25		25 test packs/case with 25 controls

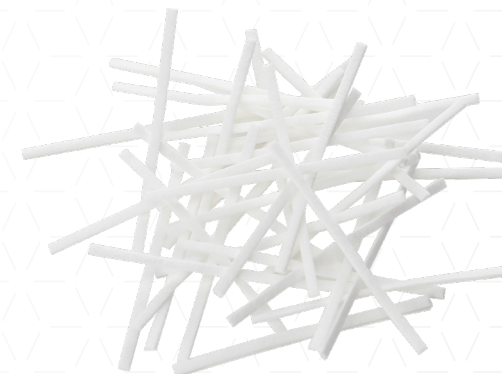
*See Smart-Well Incubator Kits in the Accessories section

SPORE STRIPS

Spore Strips are inoculated with bacterial spores on a paper carrier sealed within a convenient, peel-open glassine envelope. When Tryptic Soy Broth media (part number TSB-BP16) is used with these Spore Strips and incubated at 60°C ±2°C, then there is a reduction in incubation time of 24 hours. If incubated at 55-60°C and/or with regular TSB, then it must be incubated for 7 days.

Dimensions: Strip 0.25 x 1.0 in., glassine envelope 1.03 x 3.0 in.

Item	Part Number	Population	ATCC Number	Packaging
Spore Strip Combined: <i>B. atrophaeus</i> & <i>G. stearothermophilus</i>	5-5100	10 ⁶ / 10 ⁵	9372 & 7953	100/bag
Spore Strip Combined: Test <i>B. atrophaeus</i> & <i>G. stearothermophilus</i>	5-1000T	10 ⁶ / 10 ⁵	9372 & 7953	1,000/bag
	5-1000C	10 ⁶ / 10 ⁵	9372 & 7953	1,000/bag
<i>G. stearothermophilus</i>	3-5100	10 ⁵	7953	100/bag
	3-1000	10 ⁵	7953	1,000/bag
	3-6100	10 ⁶	7953	100/bag
Nylon Vacustat Clip	79-03150	N/A	N/A	1





More accessories can be found at mesalabs.com

INCUBATORS

Item	Part Number	Packaging
Incubator for MagnaAmp	I1510	15 cavity
Incubator for ProSpore	I1480	11 cavity
Adjustable SCBI Incubator for EZTest	I1410	13 cavity

SMART-READ INCUBATOR KITS

Item	Part Number	Packaging
Smart-Well Incubator Kit (Australian Power)	SWI1710-4	
Smart-Well Incubator Kit (European Power)	SWI1710-3	Includes incubator, printer, manual and power pack
Smart-Well Incubator Kit (U.K. Power)	SWI1710-5	
Smart-Well Incubator Kit (U.S. Power)	SWI1710-1	

POPULATION ASSAY KIT

Item	Part Number	Packaging
Population Assay Glassware and Pipettes Only	PAK-G	Four 19.5 x 145 mm sterile, flat bottom glass tubes with beads and cap; twelve 16 x 125 mm, sterile borosilicate dilution blank pipettes; two 5 ml pipettes; eight 2 ml pipettes, and eight 1 ml pipettes
Media Only - 240 ml	PAK-M	TSA only

Services

Mesa Labs offers D-value or Survival/Kill testing in state-of-the-art BIER Vessels. The D-value procedures used follow USP/ISO and can be obtained via Limited Holcomb Spearman Karber (fraction negative) method, Survivor Curve (direct enumeration) or with Stumbo-Murphy-Cochran. Mesa can inoculate and perform D-value analysis on small items (e.g. coupons or stoppers), or we can verify other brands' label claim for D-value, Z-value and population. Isolate identification services are available for most aerobic samples.

POPULATION ANALYSIS

Population Verification Testing

Confirmation of labeled population on the Certificate of Analysis. Testing involves assaying four unexposed biological indicators individually per manufacturer or Mesa Labs procedures in adherence with ISO standards.

Individual Assays

Population enumeration on individual exposed or unexposed biological indicators. Testing conducted per manufacture or Mesa Labs procedures.

Pooled Assays

Population enumeration on four, pooled, custom-inoculated components and confirmation of labeled population on the Certificate of Analysis for MagnaAmp, SterilAmp and ProSpore 4 ml BIs. Testing performed according to Mesa Labs procedures.

MAIL-IN SPORE TESTING

Our Mail-In Spore Testing services are available for steam, chemical vapor, dry heat and EtO sterilization cycles. Our service includes prompt notification on all failed tests and email test results upon completion in our laboratory. We perform a Gram-staining verification on all failed tests. Each test includes a matching control strip.

Weekly	Bi-Weekly	Monthly	Quarterly
52 tests	26 tests	12 tests	4 tests

CUSTOM SOLUTIONS

Custom filled ampoules
Dry Heat D-value on a commercially prepared BI
EtO D-value on a commercially prepared BI
Inoculation of client provided carrier or solution
Organism identification 16S rRNA
Population analysis of a commercially prepared BI
Steam D-value on a commercially prepared BI

SURVIVAL/KILL TESTING

Processes
Dry Heat Sterilization
EtO Sterilization
Steam Sterilization

D-VALUE TESTING

Process	Testing
Dry Heat	D-value - Survivor Curve or Spearman/Karber
EtO	D-value - Survivor Curve or Spearman/Karber
Steam	D-value - Survivor Curve or Spearman/Karber

We're committed to protecting the vulnerable.

At Mesa, we fulfill our purpose by providing innovative, reliable monitoring and quality assurance products and services. With over 35 years of experience in material compatibility, sterilization science, validation approaches and cycle optimization, we help ensure the safety and efficacy of your products.

Why Mesa?

- » Technical expertise in consultative services
- » FDA-registered facility, which is ISO 13485:2016 certified
- » Performance testing, standards development, AAMI and PDA members





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All products manufactured by Mesa Labs are done so in accordance with current Quality System Regulations of the United States Food and Drug Administration and meet the standards established by USP and ISO 11138. Mesa Labs' Quality System is registered to ISO 13485:2003 standards. See Mesa Labs Standard Terms and Conditions at www.mesalabs.com/terms-conditions.