

Albert Browne Ltd Sterility Assurance Products World Class and Globally Trusted



Albert Browne Sterility Assurance Products Catalogue Chemical indicators & accessories





Browne products are designed to be an integral part of the different stages of a decontamination process CLEANING, DISINFECTION and STERILIZATION and are available for almost all types of process.









Cleaning

Page 2

Cleaning can be described as the process of removing undesirable soiling from a device to the extent necessary for its further processing and its intended subsequent use.

Disinfection

Page 3

After cleaning instruments must be disinfected to make safe for subsequent handling and processing.

Sterilization

Page 4 - 9

Sterilization can be described as the destruction of micro organisms - Sterilization processes such as LTSF, EO, VH202 and steam have critical parameters, which must be attained if the process is to be successful, e.g., steam sterilization, the critical parameters are Time, Steam and Temperature.





Disinfection



Cleaning





Sterilization

Browne products are designed for use during the different stages of a decontamination process (cleaning, disinfection and sterilization) and are available for almost all types of process.





Washer Disinfector Soil Test

Easy to mix, easy to use

Ref: 2304

10 Ready to use tests/box

The Browne Washer-Disinfector Test Soil is designed to simulate the soiling that naturally occurs during theatre use and performs in an equivalent manner to the Edinburgh soil.

The Browne Soil test presents the cleaning equipment with a physical challenge such as the cleaning efficacy tests described in ISO/TS 15883-5(8).

The Browne Soil Test is supplied in powder form as individual test pots. One pot, One test.



STF Load **Check Indicator**

Designed for use with each load. Why have only one surface when you can have four?

Ref: 2312

Load Check Indicator 25/box

Ref: 2315

Load Check Indicator 100/box

Ref: 2316

Load Check Holder 1/box

The Browne STF Load Check Indicator has been carefully designed to perform in an equivalent manner to 'test soils' by providing a realistic multiple challenge for the washerdisinfector machine.

Containing two sources of protein, lipids and polysaccharides the Browne STF Load Check Indicator mimics the cleaning efficacy soil tests for surgical instruments described in ISO/TS 15883-5⁽⁸⁾, but without the mess and without the inconvenience. The Browne STF Load Check contains no blood products.



Ninhydrin Protein Detection Kit: non-visual protein check

Safe and simple testing time after time

Ref: 2369

25 x ninhydrin reagent, 5 x arginine,

25 x swabs 25 x each +ve/-ve

test labels Ref: 2370

4 tests/box

Each test of the four tests contains:

1 x test vial*, 1 x positive control vial* 1 x negative control vial*, 1 x Arginine vial for use in positive control test,

3 x sterile swabs

*contains ninhydrin reagent

Ref: 2378

Dispoclean Endoscope Cleaners -Channel diameter 2.8 – 3.2mm

Green 50/bag

Ref: 2379

DispoClean Endoscope Cleaners -Channel diameter 3.2 – 4.2mm

Yellow 50/bag

Ref: 2241

Incubator

In accordance with

EN ISO 15883-1⁽¹⁾ standard

The Browne Ninhydrin Protein Detection Kit is simple to perform. After going through a washer-disinfector process, clean instruments are swabbed to pick up any non-visual proteins that may be present.



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Des Check

Emulating indicators for use in moist heat disinfection processes

Ref: 2470

93°C/10 minutes 100 indicators/box. Conforms to ISO 11140-1 Class 6⁽²⁾ Ref: 2471

90°C/5 minutes 100 indicators/box. Conforms to ISO 11140-1 Class 6⁽²⁾

The Des Check range provides an accurate, convenient method of routine control for moist heat processes. When distributed through out the load, the indicators provide visual confirmation of conditions achieved at point of placement. The vivid colour change from yellow to blue gives clear evidence of the conditions attained, thus allowing a guick and easy assessment of the success of the process.







Formaldehyde Process Detector Spots



Formaldehyde Control Indicators

Low temperature process when high temperature steam cannot be used

Ref: 2445 Formaldehyde Load Check 200 Indicators

the indicator.

The Browne Formaldehyde Load Check uses the helix method as its barrier system, whereby formaldehyde has to penetrate

down the helical tubing to reach

Ref: 2402

Formaldehyde Process Detector Spots – 250 spots/box

Conforms to ISO 11140-1(2) Class 1

The self adhesive spots should be placed on the outside of every pack being sterilized. The spots change colour after passing through the process allowing differentiation between processed and unprocessed loads. Ref: 2401

Formaldehyde Control Indicators – 100 indicators/box

Conforms to ISO 11140-1⁽²⁾ Class 4

Formaldehyde Control Indicators should be used inside each pack to show that Low Temperature Steam and formaldehyde gas (LTSF) has penetrated the pack in a sufficient quantity and for the correct length of time for sterilization to occur.









Ethylene Oxide Spots

For use in Ethylene Oxide Sterilizers

MVI Ethylene Oxide Indicator

Lead Free and non-toxic, this advanced ink technology is both safe to use and environmentally friendly

Ethylene Oxide Integrators

For use in Ethylene Oxide Sterilizers

Ref: 2421

Ethylene Oxide Spots – 1000 spots/box

Conforms to ISO 11140-1(2) Class 1

The self adhesive spots should be placed on the outside of every pack being sterilized. The spots change colour after passing through the process allowing differentiation between processed and unprocessed loads.

Ref: 2563

MVI Ethylene Oxide Indicator – 250 indicators/box

Conforms to ISO 11140-1(2) Class 4

When placed inside trays, packs or pouches, MVI Ethylene Oxide Indicators will confirm that the gas has penetrated to the point of placement.

Ref: 2420

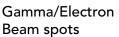
Ethylene Oxide Integrators – 100 indicators/box

Conforms to ISO 11140-1(2) Class 5

Ethylene Oxide Integrators should be placed inside each pack.

The control indicator turns from red to green when adequate sterilizing conditions have been reached, giving the end-user assurance that adequate sterilizing conditions occurred at point of placement.





Ref: 3301

Gamma/Electron Beam spots – 1000 spots/box

Conforms to ISO 11140-1⁽²⁾ Class 1 The self adhesive spots should be placed on every pack being sterilized. The spots change colour allowing differentiation, between processed and unprocessed loads.



Vapour Strip

Advanced ink technology that is both safe to use and environmentally friendly

Ref: 2501

Vapour Strip – 200 indicators/box. Conforms to ISO 11140-1⁽²⁾ Class 4

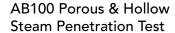
The Vapour Strip is intended for use by healthcare providers for the monitoring of the STERRAD® Sterilization System. The Vapour Strip is validated for use in STERRAD® NX and STERRAD® 100S sterilizers. When placed inside trays, packs or pouches, the vapour strip will confirm that sterilant has penetrated to the point of placement. STERRAD® is a registered trademark of Advanced Sterilization products, Division of Ethicon Inc., a Johnson & Johnson company.



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The unique patented concept of the AB100 employs both the porous and the hollow principles in direct succession.

Ref: AB100

134°C – 137°C for up to 3.5 mins Porous & Hollow Steam Penetration Test and 400 indicators Conforms to ISO 11140-4⁽³⁾ Class 2

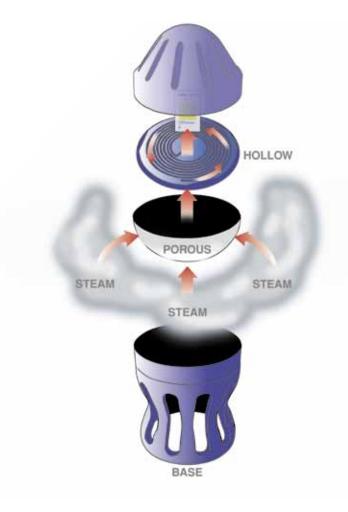
The AB100 has been specifically designed and tested to confirm that steam penetration into both porous and hollow devices is rapid and even and by implication, that air and other non condensable gases have been effectively removed.

EN ISO 17665-1

Requires that a steam penetration test is to be conducted every day that the sterilizer is used.

There are two types of steam penetration test available, the Hollow Load Test (i.e. a Helix) and the Porous Load Test (i.e. a Bowie Dick test pack). They are sometimes collectively referred to as Process Challenge Devices (PCDs). Both of these tests (PCDs) are designed to test the steam penetration (air removal) ability of the sterilizer, by creating a challenge for it's air removal system.

The unique patented concept of the AB100 incorporates both these challenges in one device – a Porous Load Test and Hollow Load test.



Strong colours - High definition - Easy to read



steam sterilization

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Bowie Dick Test Pack

A unique combination of advance Browne intelligent ink technology and the original Bowie Dick concept

Ref: 2310 121°C-124°C for 8 - 8.3 minutes 20 test packs/box Conforms to ISO 11140-4⁽³⁾ Class 2

The Browne 121°C TST Test Pack has a maximum plateau of 8.3 minutes. This enables the sensitivity of a 121°C Bowie Dick Test to be comparable to that of a 134°C Bowie Dick Test.

Bowie Dick Test Pack

A unique combination of advance Browne intelligent ink technology and the original Bowie Dick concept

Ref: 2352

134°C-137°C for up to 3.5 minutes 20 test packs/box Conforms to ISO 11140-4⁽³⁾ Class 2

A successful test confirms that steam penetration into a test pack is rapid and even and, by implication, that air and other non-condensable gases have been effectively removed. The chemical indicator sheet at the centre of the pack shows a defined colour change from yellow to dark blue/purple when exposed to a specific combination of time, temperature and steam.

Sensor Sheet

A calibrated sensor sheet with intelligent ink technology for use in standard towel pack

Ref: 2385

Sensor Sheet – 50 sheets/folder Conforms to ISO 11140-1⁽²⁾ Class 2

The Browne Sensor Sheet is designed to detect failures where the temperature in the centre of a standard towel pack is 2°C cooler than the chamber drain at the start of the sterilization plateau when used in the standard towel pack (ref 9053) specified in EN285

Intelligent Ink Technology













et Fail - Non condensable gas

Fail - Non Fail - Wet steam

m Fail - Superheat

Typical examples- actual results may differ.



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Plain Cotton Sheets

For use in small load thermometric test and traditional Bowie Dick test

Ref: 9053

Plain Cotton Sheets – 36 sheets/box Conforms to specifications given in EN 285⁽⁷⁾

Bleached white cotton sheets/ Size: 900mm x 1200mm Warp: 30 +- 6 threads per cm/ Weft: 27 +- 5 threads per cm.

TST Helix

Type B Steam Penetration Testing designed to monitor Steam Penetration into Lumen type devices

Ref: 3780

TST Helix and 250 indicators -134°C-137°C for up to 3.5 minutes Conforms to EN 867-5⁽⁴⁾

The Browne TST Control Helix is a Hollow Load Process Challenge Device (PCD) and has been developed and validated for testing the air removal (steam penetration) capability of small Type B steam sterilizers.

Use in any other sterilizer or with any other type of indicator, may give dangerously misleading results.

Small Steam Sterilizer Test Pack

Type B and S Steam Penetration Testing

Ref: 2358

TST Bowie Dick Test Pack for Eschmann Little sister 3 Vacuum & SES 2000 Vacuum 10 test packs/box

Ref: 2365

TST Bowie Dick Test Pack for Prestige Medical (22, 16 & 11 Litre) 10 test packs/box

Ref: 6536

TST Bowie Dick Test Pack for Getinge GE 224 c Vac & Citomat 164 V 20 test packs/box

Ref: 2356

TST Bowie Dick Test Pack for W&H Lisa MB 17/22 10 test packs/box

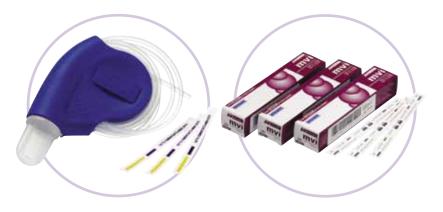
Ref: 2352

TST Bowie Dick Test Pack for Matachana M20 - B 20 test packs/box Conforms to EN 13060⁽⁶⁾ and EN 867-5⁽⁴⁾

The TST Bowie Dick test pack is a Porous Load Process Challenge Device (PCD) that has been developed and validated for testing the air removal (steam penetration) capability of the above specific brands of small Type B steam sterilizers.

steam sterilization





TST Load Check

Load control using TST control™ Technology giving you confidence to release the load

Ref: 3777

 134°C for 4 minutes/121°C for

12 minutes

Ref: 3778

134°C for 5.3 minutes/121°C for

15 minutes

Ref: 3779

134°C for 7 minutes/121°C for

20 minutes

Ref: 3783

134°C for 3.5 minutes

Load control devices are designed to act as a challenge to the steam penetration capability of the sterilizer.

MVI Steam Indicator

Made without lead and non-toxic, this patented* ink technology is both safe to use and environmentally friendly – white to black colour change

Ref: 2551

MVI Steam Indicator – 240

indicators/box

Conforms to ISO 11140-1⁽²⁾ Class 4

When placed inside trays, packs or pouches, MVI Steam Indicators will confirm that steam has penetrated to the point of placement.









TST Control™ Emulating Indicators

A complete range of emulating indicators to suit your sterilization needs

The Browne TST Control™ Emulating Indicators are calibrated to the specific cycle parameters of your sterilizer and are independently tested to ISO 11140-1 Class 6 performance criteria.

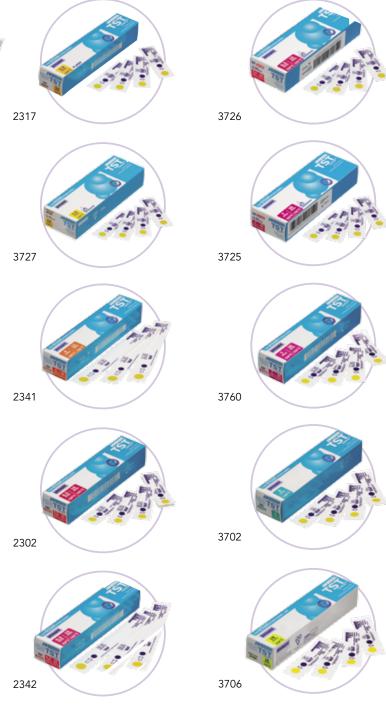
A pass from the TST Control™ Emulating Indicator proves exposure to conditions essential for sterilization

 High performances specified in standard/Time, Steam and Temperature/Clear and abrupt Colour Change, Non-toxic

Please see index at the back of brochure for indicator details.

Conforms to ISO 11140-1(2) Class 6

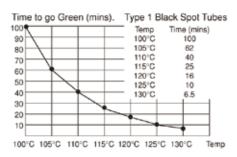
NOTE: Please ensure you select the correct indicator for your steam sterilization cycle.











Sterilization Control Tubes

Sterilization Control Tubes

Type 1 Black spot

Ref: 7301

Fluid Sterilization - 121° C/15 mins -

Class 4

Type 2 Yellow spot

Ref: 7302

Steam Sterilization* - 134° C/3 mins -

Class 4

Type 3 Green spot

Ref: 7303

Dry Heat Sterilization - 160°C/60 mins

- Class 6

Type 4 Blue spot

Ref: 7304

Dry Heat Sterilization - 180°C/12 mins

- Class 6

Type 5 White spot

Ref: 7305

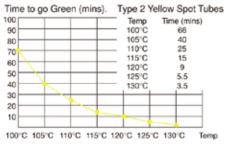
Dry Heat Sterilization - 160°C/120 mins - 180°C/35 mins - Class 6

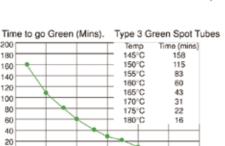
Conform to ISO 11140-1(2)

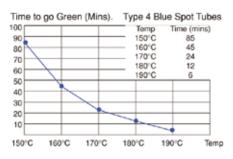
Effective and immediate visual check on sterilization conditions

- Integrated 2 criteria control of temperature and time
- Ideal for fluid and dry heat sterilizers

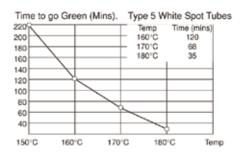
Select the Control Tube to match your sterilization parameters (time/temperature) and distribute them throughout the load prior to sterilization.

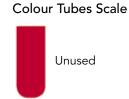






160°C



















Archive Envelope/Label Gun/documentation label

TST Control™ Duplex Label

TST Control™ Multi-part Label

Ref: 3788

Archive envelope – re-sealable envelope for BD test Sheet and printouts

Ref: 3789

Documentation Label – label features sterilization process details – duplex adhesive allows transfer to records. Process indicator replaces tape Conforms to ISO 11140-1⁽²⁾ Class 1

Ref: 3790

Label Gun 3 line for use with Documentation Label

Ref: 5017

TST Control™ Duplex Label -134°C/3.5 minutes – 200 indicator labels/box

Conforms to ISO 11140-1(2) Class 6

Using the same technology as the TST Control™ Cycle
Verification Indicators, this duplex label can create a direct link between the patient, the instruments and in-pack evidence of an effective sterilization cycle.

Ref: 5006

TST Control™ Multi-part Label -134°C/3.5 minutes - 1500 labels/reel Conforms to ISO 11140-1⁽²⁾ Class 1 & 6

Using the same technology as the TST Control™ Cycle Verification Indicators, this multi-part label creates a direct link between the patient, the instruments and in-pack evidence of an effective sterilization cycle.

Bespoke Process Indicator Labels

Browne have a range of process indicator labels – Please refer to your Browne representative who can advise on the product range.

Conforms to ISO 11140-1(2) Class 1

The process indicator labels can be used with all types of commonly used printer and are available in a range of sizes and designs compatible with most computerised traceability systems. The labels can also be handwritten.







Bio Monitors

Ref: 2232

100 units per box Steam Processes 10⁵

Ref: 2236

100 units per box Steam Processes 10⁶

Ref: 2233

100 units per box Ethylene Oxide Processes

Browne Bio Monitors - conform to the US Pharmacopeia XXIII and AAMI / ANSI standards and ISO11138⁽⁹⁾. Browne Bio Monitors contain a stated population of bacterial spores inoculated onto filter paper and placed inside a plastic culture tube. A crushable glass ampoule contains the culture medium for release after exposure to the sterilization process.

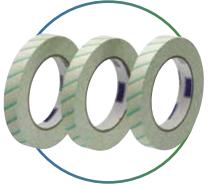
Each box contains a certificate including; Culture collection number, Lot number, Expiry Date, Spore Population,
Resistance data, Exposure in Biological Indicator Evaluation Resistometer (BIER).

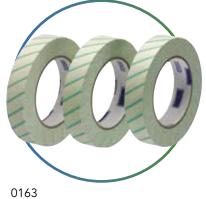
Incubator

Ref: 2241 Universal Power Pack Triple Temperature Incubator 37°C/57°C or 60°C

Browne Triple Temperature Incubator 37°C / 57°C / 60°C features 13 incubating cavities, an activation (crushing) cavity, power-on light and temperature selector switch. Please contact your Browne representative for order information.











Clear result interpretation

Ref: 0162

Steam - 18mm (3/4") x 50m - 48 rolls per carton

Ref: 0163

Steam - 24mm (1") \times 50m - 36 rolls per carton

Ref: 0167

Steam Hi Tack - $18mm (3/4") \times 50m - 48$ rolls per carton

Ref: 0168

Steam Hi Tack - $24mm (1") \times 50m - 36$ rolls per carton

Ref: 0151

Ethylene Oxide - Order code 0151 - 18mm (3/4") x 50m - 48 rolls per carton

Ref: 0160

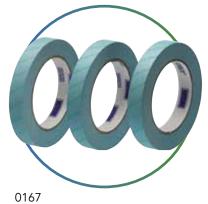
Plain - 18mm (3/4") x 50m - 48 rolls per carton

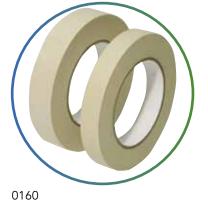
Ref: 0161

Plain - 24mm (1") x 50m - 36 rolls per carton

Traditional process indicator tape allows identification of processed from unprocessed items at a glance. The easily recognisable stripes change colour when exposed to the specific sterilant, verifying exposure to the process without the need to open packs or check records.

IMPORTANT: Please remember to confirm the tape dimensions when ordering.









Got a question? - Email: askalbert@steris.com

autoclave tape



Browne Chemical Indicator products are designed for use during the different stages of a decontamination process (cleaning, disinfection and sterilization) and are available for most types of process.

Process, Specific, Multi-Variable, Integrating, Emulating & Biological

The Six Indicator types

It is important to bear in mind that each of the six categories has specific characteristics that determine where and how the indicators should be used. This also determines the level, depth and kind of information provided, so do be sure that you choose the right type of indicator for what you want to achieve.

Process Indicators

Browne Process Indicators are usually placed on the outside of the tray, pack or pouch so that processed and unprocessed items can be identified at a glance. They give users assurance that the tray, pack or pouch has been exposed to a particular process, e.g. steam, ethylene oxide etc. but cannot provide quantitative information about the process or determine how effective it has been.

They are sometimes referred to as 'exposure control' or 'through-put' indicators.

Specific-Use Indicators

Browne specific-use indicators are designed for use in two fundamental areas; in specific test procedures defined in relevant standards and guidance documents and in monitoring defined stages of a process that would otherwise be difficult to routinely assess.

Mechanical equipment used throughout the decontamination process will have undergone validation before being sanctioned for daily use. Most machines equipped with electronic or mechanical sensors to record specific aspects of the machines activity.

These sensors are connected to monitoring and recording gauges, graphical charts and digital displays that provide fundamental information on the machine's performance. Although providing vital information on the machine's mechanical activity, they cannot provide monitoring of the physical

conditions occurring inside the chamber of the machine.
Furthermore, between scheduled maintenance visits, these sensors, monitors and recorders can lose calibration.

Browne specific-use indicators can help resolve these two issues by providing supplementary data on critical aspects/stages of a process.

Multi-Variable Indicators

Browne Multi-Variable Indicators are the first of three types of indicator available for 'in-pack' monitoring and like the others are placed inside each tray, pack or pouch before processing.

These indicators will change colour when exposed to the sterilant/ disinfectant providing users with clear visual reassurance that the agent has penetrated to the point of placement in each tray, pack or pouch.

Integrating Indicators

Browne Integrating Indicators are the second of three types of indicator available for 'in-pack' monitoring and like the others are placed inside each tray, pack or pouch before processing.

The indicators will change colour when exposed to a sterilant/ disinfectant in sufficient quantity or duration to inactivate the equivalent challenge presented by a defined and stated test organism. This provides users with clear visual reassurance that the agent has penetrated to the point of placement in each tray, pack or pouch.

Emulating Indicators

Browne Emulating Indicators are the third of three types of indicator available for 'in-pack' monitoring.

Emulating Indicators provide the most specific information of any chemical indicator available and like the others are placed inside each tray, pack or pouch before processing.



The primary difference between these and other chemical indicators is their cycle specificity. All conform to the ISO 11140-1 classification as Class 6 indicators, which means that each product will have been calibrated to perform to the predefined parameters of a particular process. The use of an Emulating Indicator will help end-users detect process failure by confirming that all of the predetermined cycle parameters have occurred at point of placement in each tray, pack or pouch. This is demonstrated through an easy to interpret colour change.



Browne Biological Indicators have two main areas of use; firstly, where regulatory authorities and guidance documents require the use of a biological indicator in a specified decontamination process. These usually include Ethylene Oxide, Plasma and Low Temperature Steam with Formaldehyde. And secondly, during a machine validation process where cycle variables need to be defined and established.

All conform to ISO 11138 and are supplied with a certificate containing the culture collection number, lot number, expiry date, spore population, resistance data and Biological Indicator Evaluation Resistometer (BIER) exposure.





Process Indicators

Specific-Use Indicators



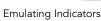




Multi-Variable Indicators

Integrating Indicators







Biological Indicators

product description

Cleaning

Ref: 2304 - Washer Disinfector Soil Test -Category (Specific Use)

Inefficient cleaning can put disinfection and sterilization procedures at risk. A poorly functioning washer-disinfector can leave behind microscopic debris that can severely compromise both the disinfection and sterilization process. One of the best and easiest ways to check whether instruments are being cleaned effectively is to present the cleaning equipment with a physical challenge.

Simply add water to the fill line, replace the cap, shake vigorously and apply to the test load with the brush provided. Following a 30-minute** drying period at room temperature, the test load should be cleaned using normal procedures and then inspected for residual soil. Detailed instructions for use included in each box.

**Drying time should not exceed 2 hours.

The bright red colour of the Browne Test Soil allows easy identification of areas that have not been properly cleaned, providing a visual analysis of equipment efficiency.

Non-toxic; contains no blood products.

Ref: 2312, 2315 – STF Load Check Indicator & Ref: 2316 STF Load Check Holder – Category: (Specific Use)

The STF Load Check Indicator and Holder are designed for use in every cycle. The Browne STF Load Check indicator is printed with a bright red soil formula that is safe to handle, easy to see and therefore easy to interpret.

The STF Load Check Holder's mesh design mimics occluded surfaces. Box joints and other occluded surfaces have always been a challenge to the washer-disinfector as each surface is shadowed by the other. These areas are difficult to clean and there is a total reliance on the machine's ability to force water and detergent into and onto these surfaces. With its mesh face occluding the surface of the indicator, the Browne STF Load Check Holder presents a challenge that is subjected to the same mechanical and chemical action.

Simply place an STF Load Check Indicator in the holder, and place the device (indicator and holder) in the tray or basket. After running one complete cycle, remove the STF Load Check Indicator from the holder and examine for evidence of residual soil.

Complete removal of the dried 'test soil' pattern from the plastic substrate provides a qualitative assessment of the washer-disinfector cleaning performance.

Ref: 2369 & 2370 – Ninhydrin Protein Detection Kit – Category: (Specific Use)

To be used with Browne Incubator.

The Ninhydrin Protein Detection Kit is intended as a method of detecting protein residues that may have remained on surgical instruments after going through a washerdisinfector process.

Clean instruments are swabbed to pick up any non-visual proteins that may be present. The swab is then placed in the vial of ninhydrin reagent and incubated at 57°C.

The reagent will react with amino acid, peptides and protein residues present and will after a minimum of 5 minutes, show a purple discolouration should the swab be contaminated.

The test kit also contains additional vials of ninhydrin reagent to perform the control tests and vials of arginine for use in the positive control.

Detailed instructions for use are supplied with every box and further quidance can be obtained from:

• EN ISO 15883-1⁽¹⁾ Washer disinfector



2304 - Washer Disinfector Soil Test - Category (Specific Use)



2312, 2315 – STF Load Check Indicator & Ref: 2316 STF Load Check Holder – Category: (Specific Use)



Ref: 2369 – Ninhydrin Protein Detection Kit – Category: (Specific Use)

product description



Sterility Assurance Products World Class and Globally Trusted

Disinfection

Emulating Indicators

Ref: 2470 and 2471 -Des Check - Category: Emulating Indicators

Des Check indicators are designed using advanced polymer technology to withstand conditions present during moist heat processes.

Des Check technology can be applied to different time and temperature combinations. Please contact us to discuss your individual cycle requirements.

Store at or below 0°C



Ref: 2470 and 2471 - Des Check - Category: Emulating Indicators

oroduct description

Sterilization

Ref: 2352 & 2310 TST Bowie Dick Test Packs -Category: (Specific Use)

Daily steam penetration tests for large porous load sterilizers

A Bowie Dick type test is an accepted method of testing the steam penetration and air removal capability of a vacuum sterilizer.

A successful test confirms that steam penetration into a test pack is rapid and even and, by implication, that air and other non-condensable gases have been effectively removed. The chemical indicator sheet at the centre of the pack shows a defined colour change from yellow to dark blue/ purple when exposed to a specific combination of time, temperature and steam. When there is no air or other non-condensable gases in the chamber, steam will penetrate the pack rapidly and completely and the indicator will show a uniform colour change. When air or other non-condensable gases are present they will collect towards the centre of the pack as an air / gas pocket which will impair contact between the steam and the indicator sheet. The temperature or moisture level (or both) will be lower in the region of the air/gas pocket and will result in a non-uniform colour change of the indicator; distinct yellow markings will be evident on the sheet.

The unique combination of advanced thermo-chromic technology and the original Bowie Dick concept, checks not only the mechanical function of the sterilizer, but also the quality of the steam supply. So when the Browne TST Bowie Dick Type Test Pack does detect a fail, the distinctive results generated by the TST indicator sheet can help diagnose the problem more quickly, saving both time and money.

Albert Browne Ltd was the first company in the world to attain the BSi Kitemark for Bowie Dick test packs. British Standards Institution not only undertook the independent testing, but also examined all the necessary production control systems

in place, to ensure consistency of manufacture. This arguably makes Browne TST Bowie Dick type test pack the most stringently tested and monitored test pack available worldwide.

There can be no greater assurance of conformance to safety and quality than the BSi Kitemark displayed on the Browne (2352) TST Bowie Dick type test pack.

Ref: 2358 (Eschmann)

Ref: 2365 (Prestige)

Ref: 6536 (Getinge)

Ref: 2356 (W&H) & 2352 (Matachana) - TST Bowie

Dick Test Packs -Category: (Specific Use)

Daily steam penetration tests for small steam sterilizers Type B

The TST Bowie Dick test pack is a Porous load Process Challenge Device (PCD) that has been developed and validated for testing the air removal (Steam penetration) capability of specific brands* of small type B steam sterilizers. The Browne TST Bowie Dick pack should be processed alone in a preheated chamber at the start of each day/shift.



BROWNE

Sterility Assurance Products World Class and Globally Trusted

Ref: 3780 TST Helix -Category: (Specific Use) Hollow Load process

Challenge Device (PCD)

A successful Browne TST Helix test confirms steam penetration through the helix and confirms by implication that air and other non-condensable gases have been removed.

The chemical indicator located in the capsule will show a defined colour change from yellow to dark blue/ purple when exposed to a specific combination of time, temperature and steam. When all air has been removed from the sterilizer chamber, steam will penetrate through the helix and the indicator will show a uniform colour change. If air or noncondensable gases are present they will impair contact between the steam and the indicator resulting in a non-uniform colour change; distinct yellow markings will be evident on the indicator.

The TST Helix has a limited life, so after 250 indicators have been used, the device must be replaced. Failure to do so could result in failure of the device and dangerously misleading results.

Ref: 3777, 3778, 3779 & 3783 TST Load Check - Category: (Specific Use)

Load control using TST Control™ Technology

The Browne TST Load Check uses the helix method as its barrier system, whereby steam has to penetrate down the helical tubing to reach the indicator.

Ref: 2445 Formaldehyde Load Check - Category: (Specific Use)

The Browne Formaldehyde Load Check uses the helix method as its barrier system, whereby formaldehyde has to penetrate down the helical tubing to reach the indicator.

Ref: 2385 Sensor Sheet - Category: (Specific Use)

For use in standard towel packs

The Sensor Sheet has been calibrated for use in the standard towel pack as specified in EN285⁽⁷⁾. It is designed to detect failures where the temperature in the centre of a standard towel pack is 2°C cooler than the chamber drain at the start of the sterilization plateau.

If the sterilizer achieves complete air removal and rapid steam penetration into the centre of the towel pack, the Sensor Sheet will indicate a pass i.e. the pale yellow sheets will change colour to a blue/green colour.

In the event of failure, the presence of air or other non-condensable gas is sensed by a chemical reaction. The Sensor Sheet will demonstrate a fail pattern i.e. a yellow or brown will be clearly visible.

The Browne Sensor Sheet incorporates Sensor Technology. Made without lead and heavy metal salts traditionally associated with Bowie Dick test sheets, the Browne Sensor Sheet is safe to handle and easy to dispose of.

Detailed instructions for running a standard cotton sheet Bowie Dick test are included with the Sensor sheets. Browne Plain Cotton sheets for use with the Sensor sheet are available on Ref 9053. Please refer to the relevant page of this catalogue for further details.

Ref: 9053 Plain Cotton Sheets – Category: (Specific Use)

For use in small load thermometric test and traditional Bowie Dick test.

Approximately 32 – 36 sheets folded to 220 mm x 300 mm would be required to produce a pack approx. 250 mm in height and 7kg +- 10% in weight.

Note: must be laundered before use without the use of fabric conditioning agent.

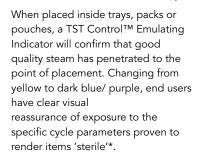
The Browne Sensor Sheet shown is available on Ref 2385. Please refer to

the relevant page of this catalogue for further details.

Ref: 2317, 2340, 3727, 2341, 2302, 2342, 2375, 3726, 3725, 3760, 3702, 3706 –

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Category: Emulating Indicators



The TST Control™ Emulating Indicator allows the end user to single out individual trays, packs or pouches that were not exposed to sufficient sterilization conditions.

Strong colours – High definition – Easy to read

*EN 556⁽¹⁰⁾ Sterilization of Medical Devices Requirements for medical devices to be designated 'sterile'

'A sterile product is one which is free of viable micro-organisms'

'The European Pharmacopoeia Commission considers that a product may be regarded as 'sterile' when the theoretical level of not more than one living micro-organisms is present in 1x10⁶ sterilized units of final products'

TST Control™ Emulating Indicator incorporates the unique TST ink technology. Lead free and non-toxic, this patented ink technology is both safe to use and environmentally friendly.

Albert Browne Ltd was the first company in the world to be able to display the BSi Kitemark on Class 6 emulating indicators for cycle verification. British Standards Institution (BSi) not only undertook the independent testing, but also examined all the necessary production control systems in place, to ensure consistency of manufacture. This arguably makes Browne TST ControlTM emulating indicators





the most stringently tested and monitored indicators available worldwide. There can be no greater assurance of conformance to safety and quality than the BSi Kitemark displayed on the TST Control™ Emulating Indicator.

ISO 11140-1⁽²⁾ KM 60358

Ref: 2401 Formaldehyde Control Indicators -Category: (Multi Variable)

The Formaldehyde Control Indicator turns from blue to a complete green when adequate sterilizing conditions have been reached.

It is recommended that Browne Formaldehyde Process Detector Ref 2402 Spots are placed on the outside of each pack to allow processed and unprocessed items to be identified at a glance. Note that the spots are not calibrated to be used as an 'in-pack' control indicator.

Ref: 2402 Formaldehyde Process Detector Spots -Category: (Process Indicators)

Colour change blue to yellow

Note: The spots do not act as a control and are not intended as a guide to the efficacy of the process.

Ref: 2563 MVI Ethylene Oxide Indicator – Category: (Multi Variable)

MVI Ethylene Oxide Indicator change from bright orange to vivid red, end users have clear visual reassurance of exposure to an ethylene oxide sterilization process.

MVI Ethylene Oxide Indicators can be used in all current ethylene oxide sterilization processes.

Made without lead and nontoxic, this advanced ink technology is both safe to use and environmentally friendly.

Ref: 2551 MVI Steam Indicator – Category: (Multi-Variable)

With a colour change from white to black, end users have a clear visual assurance of exposure to a steam sterilization process.

Browne MVI Steam Indicators can be used in all cycles ranging from 120°C - 140°C.

* US patent no. 6149863 European patent No. EP0963418 & others

Ref: 2501 Vapour Strip – Category: (Multi-Variable)

The indicators change from magenta to yellow, giving end users clear visual assurance of exposure to an effective STERRAD® process.

Browne Vapour Strip Indicators incorporate advanced ink technology that is both safe and environmentally friendly.

STERRAD is a registered trademark of Advanced Sterilization Products.

Ref: 2420 Ethylene Oxide Integrators – Category: (Integrating)

Ethylene Oxide Integrators will show a fail if the relative humidity level, gas concentration, temperature or duration of exposure fall outside of the specified limits.

900mg Concentration (mg per litre)

Temperature: 55°C - 37°C Time: 20 - 55 minutes Humidity: 40–60%

600mg Concentration (mg per litre) Temperature: 55°C - 37°C

Time: 35 - 70 minutes Humidity: 40–60%

It is recommended that Browne Ethylene Oxide Process Detector (Ref: 2421) Spots are placed on the outside of each pack to allow processed and unprocessed items to be identified at a glance. Note however, that the spots are not calibrated for use as an 'in-pack' control indicator.

Ref: 2421 Ethylene oxide Spots – Category: (Process)

Colour change Brown to Green

Note: The spots do not act as a control and are not intended as a guide to the efficacy of the process.

Ref: 3301 Gamma/Electron Beam Spots – Category: (Process)

Colour change Gold to Dark Red

Note: The spots do not act as a control and are not intended as a guide to the efficacy of the process.

Ref: 7301, 7302, 7303, 7304, 7305 Sterilization Control Tubes – Category: (Multi Variable)

* Browne recommends the use of TST Control™ Emulating Indicators for monitoring porous load steam sterilization processes.

Dry Heat

Place the tubes closely beside or inside the most inaccessible articles to be sterilized.

Fluids

Place a control tube in a test bottle of the solution to be sterilized and place in the centre of the sterilization chamber.

Instructions for use and colour guides are included with each box.

Custom Control Tubes

Fluid or Dry Heat Sterilization.

For cycles different to those specified above, Browne can manufacture Control Tubes to meet your specific time / temperature parameters.

Using the same clear red to clear green colour scale verification as the standard tubes, they will provide an immediate visual check for your specific sterilization cycle.

1 litre of the solution can be manufactured and stored on our premises for up to 12 months. This is sufficient quantity for approximately 50 boxes of tubes and can be called off when required. Please contact us to discuss your individual requirements.



Documentation & Record Keeping

Ref: 3788 Archive envelope – re-sealable envelope for BD test Sheet and printouts

Ref: 3789 Documentation Label – label features sterilization process details – duplex adhesive allows transfer to records. Process indicator replaces tape.

Conforms to ISO 11140-1 Class 1

Ref: 3790 Label Gun 3 line for use with Documentation Label

Ref: 5017 TST Control™ Duplex Label – Category: Emulating Indicators

Compatible with all manual traceability systems the TST Control™ Duplex Label is ideal for use in departments, clinics or surgeries that use small steam bench top sterilizers.

During preparation and packing, information about the tray, pack or pouch can be written on the label. At point of use, the label is retrieved and reapplied into the record card as evidence of an effective sterilization cycle.

Ref: 5006 TST Control™ Multi-part Label – Category: Emulating Indicators

Compatible with most computerised traceability systems, the left hand section is pre-printed with a Class A process indicator while the right hand section incorporates a Class 6 cycle verification indicator using Browne's unique TST ControlTM technology.

During packing, both sections are printed with bar coded pack data using the existing computerised traceability system. The right hand section is then placed inside the pack, affixed to the tray list if appropriate, while the left hand section is attached to the outside of the tray, pack or pouch in the usual way.

At point of use, the right hand section is retrieved from the tray, pack or pouch and reapplied into the patient's notes as evidence of an effective sterilization cycle.

Ref: N/A Process Indicator Label – Category: (Process)

Patented indicator technology - US Patent no. 6149863 - European Patent No. EP0963418 & others

Browne produces a range of labels in various sizes, substrates and designs but can produce custom labels to your own specification.

Custom options for labels include;

- Simplex or duplex backing single or double backing layers for repositioning
- Personalisation hospital or company logo etc.
- Multiple indicators- e.g. steam and ethylene oxide
- Multi-part labels detachable sections for documenting different stages
- ISO 11140-1 Class 1 indicators for steam, ethylene oxide, formaldehyde or gamma/electron beam
- Choice of colour change for steam indicators – pink to dark brown or colourless to black

Please contact us to discuss your requirements.





Biological Indicators

Browne Bio Monitors for a steam process contain the spores of *Geobacillus stearothermophilus* and have an external chemical indicator on the label. This changes from green to blue/grey when sterilization exposure has occurred. The Bio Monitor should be incubated at 57°C for no longer than 48 hours following exposure and the results read approximately every 12 hours.

If spores survive the sterilization cycle, the culture medium will turn to yellow (positive). If the spores have been killed, the culture medium will retain the original purple colour.

Browne Bio Monitors for an ethylene oxide process contain the spores of Bacillus atrophaeus and have an external chemical indicator on the label. This changes from light blue to tan when sterilization exposure has occurred. The Bio Monitor should be incubated at 37°C for no longer than 48 hours following exposure and the results read approximately every 12 hours. If spores survive the sterilization cycle, the culture medium will turn to yellow (positive). If the spores have been killed, the culture medium will retain the original red colour.

Note: Positive (yellow) results should be recorded and the culture tube autoclaved again prior to disposal.

Incubator

Browne Triple Temperature Incubator 37°C/57°C/60°C features 13 incubating cavities, an activation (crushing) cavity, power-on light and temperature selector switch. Please contact your Browne representative for order information.

Autoclave Tape

Ref: 0162, 0163, 0167, 0168, 0151, 0160, 0161 – Autoclave Tape Category: (Process)

Steam Process Indicator Tape is a packaging tape with steam-sensitive indicator ink.

The high contrast colour change is designed to show at a glance that the pack has been exposed to a steam sterilization process. Manufactured from treated crepe paper and coated with high performance cross linked pressure sensitive adhesive, the tape securely bonds to paper, plastics, non-wovens, board, metal, glass and linen.

The 'hi tack' version is as above but incorporating a stronger adhesive to adhere to 'treated' paper wrap. This is not recommended for use with textiles as it can leave a residue. The tape is blue in colour.

Plain tape is similar to steam indicator tape but without the stripes. Designed as a packaging tape but with special adhesive qualities to withstand steam sterilization.

IMPORTANT: Please remember to confirm the tape dimensions when ordering.



AB100 Porous & Hollow Steam Penetration Test

Steam penetration into a porous load is determined by both the mass and the porosity of the load, whereas steam penetration into a hollow lumen-type device (helix) is determined principally by the level of vacuum and the size of the pressure excursion (air removal pulse size).

The steam and entrained noncondensable gas must first be attracted to the mass of the porous dome. Steam and air will then be forced into the dome and then into the lumen part of the device.

The length of lumen is 1.5 metres and the nominal diameter is 2mm. The indicator, located at the terminal end of the lumen, will then react to the conditions present in the indicator capsule; air or other non-condensable gases will produce a 'fail' result, whereas rapid and even steam penetration will produce a 'pass' result.

The chemical indicator in the centre of the device shows a defined colour change from yellow to blue / purple when exposed to a specific combination of time, temperature and steam.

When there is no air or other noncondensable gases in the chamber, steam will penetrate the device rapidly and evenly and the indicator will show a uniform colour change.

When air or other non-condensable gases are present they will collect around the device as an air / gas pocket that will enter the device, resulting in impaired contact between the steam and the indicator. The temperature or moisture level (or both) will be lower in the region of the air / gas

pocket and will result in a non-uniform colour change of the indicator; distinct yellow markings will be evident on the indicator.

The unique combination of advanced thermo-chromic technology and the original Bowie Dick concept, verifies not only the mechanical function of the sterilizer, but also the quality of the steam supply. So when the device does detect a fail, the distinctive results generated by the TST indicator technology can help diagnose the problem more quickly, saving both time and money.



product references

1. EN ISO 15883-1

Washer disinfectors Part 1 General requirements and tests.

2. ISO 11140-1

Sterilization of health care products -Chemical indicators. Part 1: General requirements.

3. ISO 11140-4

Sterilization of health care products - chemical Indicators - Part 4: Class 2 indicators as an alternative to the Bowie and Dick type test for the detection of steam penetration.

4. EN867-5

Non-biological systems for use in sterilizers - Part 5: Specification for indicator systems and process challenge devices for use in performance testing for small sterilizers Type B and Type S.

5. EN ISO 17665-1

Sterilization of health care products moist heat – part 1: Requirements for the development, validation and routine control of a sterilization process for medical devices.

6. EN 13060

Small Steam Sterilizers.

7. EN 285

Sterilization - Steam sterilizers -Large sterilizers.

8. ISO/TS 15883-5

Washer-disinfectors - Part 5: Test soils and methods for demonstrating cleaning efficacy.

9. ISO 11138

Sterilization of health care products -Biological indicators.

10. EN 556-1

Sterilization of Medical Devices -Requirement of medical devices to be designated 'STERILE'. Part 1 Requirement for terminally sterilized medical devices.





Product Index



Cleaning

REF	Description	Quantity	Page
2304	Washer Disinfector Test Soil	10 Pots	2
2315	STF Load Check Indicators	100 Indicators	2
2316	STF Load Check Holder	Single Holder	2
2370	Ninhydrin Protein Detection Test	4 Tests	2
2369	Bulk Ninhydrin Protein Detection Test	25 Tests	2
2378	Dispoclean Endoscope Cleaners – channel diameter 2.8 – 3.2mm - Green	50 Bags	2
2379	Dispoclean Endoscope Cleaners – channel diameter 3.2 – 4.2mm - Yellow	50 Bags	2
2241	Triple Temperature Incubator 37°C/57°C or 60°C	Single Incubator	2

Thermal Disinfection

REF	Description	Quantity	Page
2470	Des Check 93°C/10 mins	100 Indicators	3
2471	Des Check 90°C/5 mins	100 Indicators	3

Sterilization - Bowie Dick

REF	Description	Quantity	Page
2310	TST Bowie Dick Test Pack for sterilizers working at 121°C - 124°C for 8 to 8.3 mins	20 Packs	6
2352	TST Bowie Dick Test Pack for sterilizers working at 134°C - 137°C/for up to 3.5 mins	20 Packs	6
2358	TST Bowie Dick Test Pack for Eschmann Little Sister 3 Vacuum & SES 2000 Vacuum	10 Packs	7
2365	TST Bowie Dick Test Pack for Prestige Medical (22, 16 & 11 Litre)	10 Packs	7
6536	TST Bowie Dick Test Pack for Getinge GE 224 C Vac & Citomat 164 V	20 Packs	7
2356	TST Bowie Dick Test Pack for W&H Lisa MB 17/22	10 Packs	7
2352	TST Bowie Dick Test Pack for Matachana M20 - B	20 Packs	7





REF	Description	Quantity	Page
3780	TST Helix working at 132°C - 137°C for up to 3.5 mins	1 Helix/250 Indicators	7
3777	TST Load Check working at 134°C for 4 mins/121°C for 12 mins	1 Helix/400 Indicators	8
3778	TST Load Check working at 134°C for 5.3 mins/121°C for 15 mins	1 Helix/400 Indicators	8
3779	TST Load Check working at 134°C for 7 mins/121°C for 20 mins	1 Helix/400 Indicators	8
3783	TST Load Check working at 134°C for 3.5 mins	1 Helix/400 Indicators	8
2445	Formaldehyde Load Check	1 Load Check/ 200 Indicators	3

Sterilization - Sensor Sheet/Plain Cotton Sheets

REF	Description	Quantity	Page
2385	Sensor Chemical Indicator Test Sheet for use at 121°C - 137°C in a Standard Bowie Dick Towel pack	50 Sheets	6
9053	Plain Cotton Sheets for use in Standard Towel pack	36 Sheets	7

Sterilization - TST Class 6 Indicators

REF	Description	Quantity	Page
2317	TST Control™ Emulating Indicators 134°C/3.5 mins 'Flash'	200 Indicators	9
2340	TST Control™ Emulating Indicators 134°C/3.5 mins	100 Indicators	9
3727	TST Control™ Emulating Indicators 134°C/3.5 mins Self Adhesive	100 Indicators	9
2341	TST Control™ Emulating Indicators 134°C/4 mins & 121°C/12 mins	100 Indicators	9
2302	TST Control™ Emulating Indicators 134°C/5.3 mins & 121°C/15 mins	200 Indicators	9
2342	TST Control™ Emulating Indicators 134°C/5.3 mins & 121°C/15 mins	100 Indicators	9
3726	TST Control™ Emulating Indicators 134°C/5.3 mins & 121°C/15 mins Self Adhesive	100 Indicators	9
3725	TST Control™ Emulating Indicators 134°C/7 mins & 121°C/20 mins Self Adhesive	200 Indicators	9
3760	TST Control™ Emulating Indicators 134°C/7 mins & 121°C/20 mins	200 Indicators	9
3702	TST Control™ Emulating Indicators 134°C/9 mins	200 Indicators	9
3706	TST Control™ Emulating Indicators 134°C/18 mins	200 Indicators	9





Sterilization - Formaldehyde/MVI and EO

REF	Description	Quantity	Page
2401	Formaldehyde Control Indicators	100 Indicators	3
2402	Formaldehyde Process Detector Spots	250 Spots	3
2563	MVI Ethylene Oxide	250/500 Indicators	4
2551	MVI Steam	240/480 Indicators	8
2501	Vapour Strip	200 Indicators	4
2420	Ethylene Oxide Integrators	100 Indicators	4
2421	Ethylene Oxide Spots	1000 Spots	4

Sterilization - Control Tubes

REF	Description	Quantity	Page
7301	Browne Control Tubes Type 1 Black Spot Fluid Sterilization 121°C/15 mins	100 Tubes	10
7302	Browne Control Tubes Type 2 Yellow Spot 134°/3 mins	100 Tubes	10
7303	Browne Control Tubes Type 3 Green Spot Dry Heat Sterilization 160°C/60 mins	100 Tubes	10
7304	Browne Control Tubes Type 4 Blue Spot Dry Heat Sterilization 180°C/12 mins	100 Tubes	10
7305	Browne Control Tubes Type 5 White Spot Dry Heat Sterilization 160°C/120 mins & 180°C/35 mins	100 Tubes	10

Sterilization - Gamma/Electron Beam Spots

REF	Description	Quantity	Page
3301	Gamma Electron Beam spots	1000 Spots	4



Documentation & Record Keeping

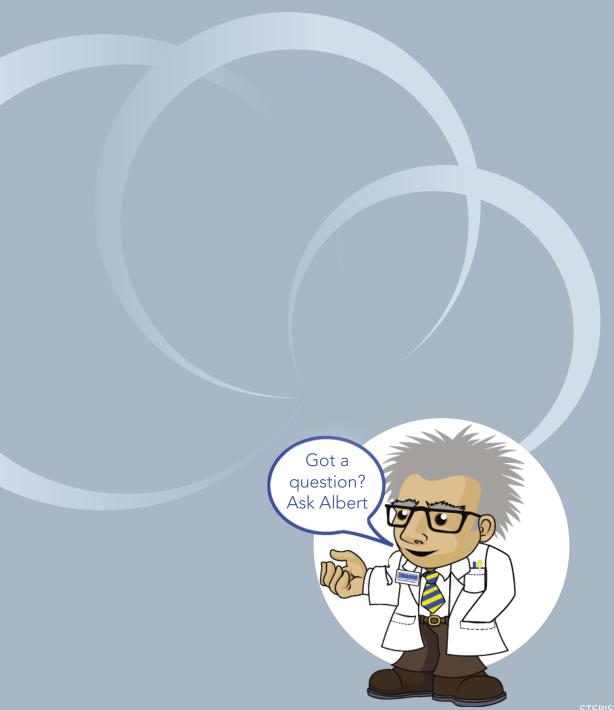
REF	Description	Quantity	Page
3788	Archive Envelopes	Single Item	11
3789	Documentation Label	500 labels per roll/ 24 rolls per box	11
3790	Label Gun	Single Item	11
5017	TST Control™ Duplex Label	200 labels	11
5006	TST Control™ Multi part Label	1500 labels	11
N/A	Process Indicator Labels	N/A	11

Biological Monitors/Indicators & Accessories

REF	Description	Quantity	Page
2232	Steam Processes 10 ⁵	100 Units	12
2236	Steam Processes 10 ⁶	100 Units	12
2233	Ethylene Oxide Processes	100 Units	12
2241	Triple Temperature Incubator 37°C, 57°C or 60°C	Single Item	12

Autoclave Tape

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REF	Description	Quantity	Page
0162	Steam Indicator Tape 18mm (3/4") x 50m	48 Rolls per Carton	13
0163	Steam Indicator Tape 24mm (1") x 50m	36 Rolls per Carton	13
0167	Steam Indicator Tape Hi Tack (blue) 18mm x 50m	48 Rolls per Carton	13
0168	Steam Indicator Tape Hi Tack (blue) 24mm (1") x 50m	36 Rolls per Carton	13
0151	Ethylene Oxide Tape 18mm (3/4") x 50m	48 Rolls per Carton	13
0160	Plain Masking Tape 18mm (3/4") x 50m	48 Rolls per Carton	13
0161	Plain Masking Tape 24mm (1") x 50m	36 Rolls per Carton	1



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