SWORD SCIENTIFIC

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Pharmaceutical

Medical

Biotechnology

CRITICAL ENVIRONMENT CONTAINERS

ABOUT SWORD SCIENTIFIC

Sword Scientific is a specialist supplier of environmental and laboratory sample containers. The company has made a name for itself as a reliable and innovative player, with a continually expanding range of products and services.

Our dedicated staff have over 35 years of combined experience in the sale and distribution of scientific products and instrumentation. Our mission is to be a vibrant and professional partner supplying unique scientific products into niche European markets.

Vibrant: Our goal is to be innovative with the products and the service we provide. We constantly seek to work in partnership with our customers.

Professional: All members of staff pride themselves on their professional approach to their responsibilities, in particular with regards to the personal way in which each and every customer is managed.

Unique: We offer a unique, near complete product range and aspire to meet all of our clients' sampling application requirements. Our speciality custom container cleaning service is one example of our uniqueness.

Our range of critical environment containers is specifically designed for use in medical, pharmaceutical, biotechnical and semiconductor applications. We offer a range of ready-to-use, certified glass and HDPE-ware, in a variety of volumes and quantities. A custom cleaning service for customer products is available on request. All cleaning services are carried out in a 100/10 cleanroom. Each lot comes with a Certificate of Analysis.

We hope you will find this catalogue helpful. If you have any questions or comments, please let us know. Our contact details can be found at the back of this catalogue.

CONTENTS

PROCESS DEFINITIONS

Process	Definition	Common Applications
Depyrogenation	• Destroys and removes endotoxins. • Reduced endotoxin content by 99.9%.	• Injectable or parenteral drugs • Lyophilisation • Final packaging • Stability and clinical studies
Silanisation	• Stabilises and prevents reaction with the glass surface. • Prevents components of the glass leaching into the samples.	• Proteins • Assays of blood serum
Siliconisation	• Coating with a medical-grade silicone emulsion. • Prevents sample material from reacting with the glass container.	• Proteins • Assays of blood serum
Total Organic Carbon (TOC) Process	• Measure of carbon covalently bound in organic molecules in a water sample. • Vials are certified to contain <10ppb TOC.	• Validation of water systems • Equipment and cleaning validations • Monitoring of low levels of organic contaminants

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Process	Definition	Common Applications
Particulate Cleaning	• High-purity 17 Meg-ohm, electronics-grade water. • Low particle water is heated and used for cleaning processes.	Numerous applicatons in pharmaceutical, biotechnology and medical industry
Irradiation	• Radiation dose sufficient to destroy all viable forms of life. • Gamma sterilisation of glassware, stoppers, seals, caps and plastic containers available.	• Injectable and parenteral drugs • Lyophilisation • Final drug delivery packaging • Clinical trials
Sterile Foil-Wrap	• Destroys all living organisms. • Glassware sterilised via a validated dry-heat, foil-wrap method. • Stoppers and seals sterilised via autoclave methods.	• Injectable drugs • Parenteral drugs • Stability studies • Clinical trials
USP Purified Water and WFI Rinses	• Exceed USP specifications for TOC, conductivity, bacterial and endotoxin levels. • Final products meet FDA requirements.	Various cleanroom applicatons in: • Pharmaceutical industry • Biotechnology • Medical industry
Steam Sterilisation	• Destruction of all viable forms of life, via steam, heat and pressure.	• Injectable and parenteral drugs • Lyophilisation • Final drug delivery packaging • Stability studies

TOTAL ORGANIC CARBON VIALS

The Product

A series of low-level certified vials for Total Organic Carbon testing and sampling, developed to simplify cleaning validation and reduce costs. At present, these vials are the only certified vials of this type in the market. They are used and recommended by major TOC instrument manufacturers and fit most automated TOC instruments. All versions are tested and certified to contribute <10ppb or <20ppb TOC as background.

TOC (ppb)	Capacity/ml	Colour	Description	Qty/Case
<20	40	Clear	Vial, cap cover, open top cap	144
<10	40	Clear / Amber	Vial, cap cover, open top cap	144

Certificate of Analysis provided / Custom Cleaning Service available (page 9) √

TOTAL ORGANIC CARBON SPECIALITY WATER

The Product

In addition to our containers, we also stock high purity speciality water and other high-grade speciality waters, including Low Particle water, Reagent-Grade water, and Pyrogen-Free™ water. All speciality waters are filtered to contain less than 50ppb Total Organic Carbon and are supplied in amber glass containers which have been pre-cleaned in a class 10 environment to maintain quality.

Capacity/ml	Description	Qty/Case
1L	Amber Boston Round	12
4L	Amber Jug	4

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TOTAL ORGANIC CARBON BOSTON ROUNDS

The Product

The Boston Round containers are also available TOC certified from the product range. The Bostons can be certified to <20ppb or low level <10ppb, depending on the application.

Typical applications include the collection and storage of WFI and other high purity water sampling applications.

TOC (ppb)	Capacity/ml	Colour	Description	Qty/Case
<20	125	Amber	Boston Round, PTFE-lined cap	12
<20	250	Clear	Boston Round, PTFE-lined cap	24
<20	250	Clear	Boston Round, open top cap	24
<20	250	Amber	Boston Round, open top cap	12
<10	1L	Amber	Boston Round, PTFE-lined cap	12

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TOTAL ORGANIC CARBON CULTURE TUBES

The Product

Both open and closed top TOC certified culture tubes are available. All are certified to <20ppb, with the 16mm version available as a <10ppb certified tube.

Typical applications include the sampling of WFI and other high purity water applications.

TOC (ppb)	Capacity/ml	Description	Qty/Case
<20	17	Culture tube 18 x 100mm, open top	200
<20	60	Culture tube 25 x 150mm, open top	144
<20	18	Culture tube 16 x 125mm	255
<10	18	Culture tube 16 x 125mm	255

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STERILE VIALS

The Product

A range of clear, Type I borosilicate sterile vials with butyl stoppers and aluminium seals, suitable for uses where an aseptic protocol is required. All vials are depyrogenated and assembled to meet endotoxin levels of less than 0.06 EU/ml and are certified. The vials are available in a number of finishes and a variety of sizes, from 1ml to 100ml. Certificates of Sterility and Pyrogen Test provided.

Part number	Capacity/ml	Finish/mm	Qty/Case
ST1-11	1	11	100
ST2-13	2	13	100
ST5-13	5	13	50
ST5-20	5	20	50
ST10-20	10	20	50
ST20-20	20	20	50
ST30-20	30	20	50
ST50-20	50	20	50
ST100-20	100	20	50

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DEPYROGENATED GLASS

The Product

In addition to the sterile vials, we are able to supply other depyrogenated glass containers. All products in this range contain less than 20 particles per millilitre and more than 0.3 microns, and are prepared to meet endotoxin levels of less than 0.06 EU/ml.

Certificates of Sterility and Pyrogen Test are provided as standard; additional low particle certification is available on request (i.e. aluminium, calcium, copper, iron, potassium, magnesium, manganese, sodium and zinc <10ppb). All containers are supplied assembled with a PTFE-lined polypropylene cap.

Capacity/ml	Colour	Description	Qty/case
60	Clear / Amber	Wide mouth jar	24
125	Clear	Wide mouth jar	12 / 24
125	Amber	Wide mouth jar	12
1L	Amber	Wide mouth jar	12
2L	Clear	Wide mouth jar	6
2.5L	Amber	Wide mouth jar	4
4L	Clear	Wide mouth jar	4

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PARTICLE-CERTIFIED GLASS CONTAINERS

The Product

A range of Class 100/10 cleanroom prepared glass containers, virtually free from particles. All products are assembled containing less than 5 particles per millilitre and more than 0.5 microns, and are fitted with low-shedding polypropylene caps with chemically inert PTFE faced liners free from adhesives.

Capacity/ml	Description	Colour	Finish	Qty/Case
15	Wide mouth jar	Amber	n/a	57
60	Bottle	Amber	20-400	24
125	Bottle	Clear / Amber	24-414	12 / 14
250	Bottle	Clear / Amber	24-414	12
500	Bottle	Amber	28-400	12
1L	Bottle	Amber	33-430	12
4L *	Jug	Amber	38-430	4

* Also available as sodium and potassium certified, <100ppb

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PARTICLE-CERTIFIED HDPE CONTAINERS

The Product

Class 100/10 cleaned, narrow mouth natural High Density Polyethylene (HDPE) bottles with leak-proof polypropylene caps, for use in sampling packaging and for combination packaging for hazardous shipping. All containers are ready for use in customer cleanrooms. Each lot is tested and certified to contain less than 20 particles per millilitre and more than 0.3 microns. Optional quality control documentation available on request.

Capacity/ml	Colour	Description	Qty/case
125	Amber	Wide mouth jar	12
250	Clear / Amber	Wide mouth jar	24
1L	Amber	Wide mouth jar	4

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SILANISED VIALS

The Product

Silanisation is a process of vapour phase deposition onto the surface of the glassware. It deactivates sites on the surface of the glass to allow for maximum recovery of trace analytes.

Our silanised vials are developed to preserve the integrity of materials or extracts stored in glass containers. The use of these ready-to-use vials is recommended for quantitative analysis and material storage, thus saving valuable personnel time and minimising waste costs.

Size/O.D. x Height/mm	GPI Thread Finish	Colour	Qty/Case
12 x 32	8-425	Clear / Amber	100
12 x 32	10-425	Clear / Amber	100
15 x 45	13-425	Clear / Amber	100

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SILANISED CULTURE TUBES

The Product

Disposable, silanised, Type I borosilicate glass culture tubes for use in analysis and storage. Silanisation is a process of vapour phase deposition onto the surface of the glassware. The silanisation treatment prevents materials adhering to the surface of the tube, allowing maximum recovery of trace analytes.

Capacity/ml	Size/O.D. x Height/mm	Qty/Case
6	12 x 75	1,000
10 *	13 x 100	1,000
15 *	16 x 100	1,000
19	15 x 125	1,000

* Screw thread culture tubes also available

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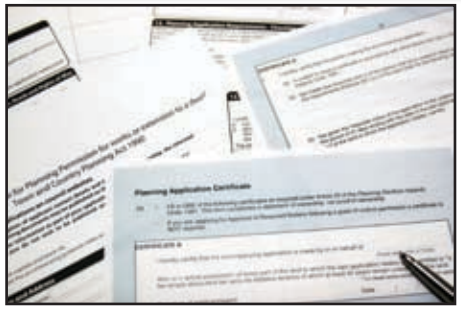
CERTIFICATION



Why?

To assure users of the integrity of the cleaning process used, each lot of containers from our standard product line is lot labelled, packaged in a suitable material, and delivered with a Certificate of Analysis.

Types of Certification:

- Certificate of Analysis - TOC
- Certificate of Processing
- Certificate of Sterility/USP
- Certificate of Analysis - Particles
- Materials Certificate of Compliance

Types of Packaging:

- Class 10 Cleanroom Polyethylene bags (Single, Double or Triple bags)
- Class 10 Cleanroom Breathable Tyvek®/ Polyethylene Autoclaveable bags (Single, Double or Triple bags)
- Cleanroom-grade aluminium foil-wrap (Single, Double or Triple layers of foil)
- Non-shedding woven Polypropylene Autoclave wrap (Single, Double or Triple wraps).

CUSTOM CLEANING

The Service

At Sword Scientific we have the capability and flexibility to clean customers' standard and non-standard clear and amber glass or plastic containers, including closures and other component parts. Our custom cleaning services are available for containers from 1ml to 20L. We aim to meet each customer's cleaning requirements for both high volumes or smaller quantities.

Like the containers from our standard line, all custom cleaned containers are delivered with the appropriate Certificate of Analysis, provided they are packaged in accordance with the level of certification required.

For full details concerning the cleaning processes offered, please refer to the 'Process Definitions' section on pages 1 and 2 of this catalogue.

A Custom Cleaning Specification Sheet is available on request. Our contact details can be found at the back of this catalogue.

QUERIES / PLACE AN ORDER

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