

Thomas Scientific's Guide to Single-Use Solutions

Why you should consider single-use

More Specifics to Ensure Quality

Sterile assemblies are validated to a sterility assurance level of 10⁻⁶ per ISO 11137 method VDmax.

We have experienced engineers available for technical assistance supported by the suppliers.

- Thomas offers off the shelf, made to order, or custom single-use products from a variety of suppliers.
- Single-use products reduce cross contamination.
- Single-use products are pre-assembled, saving production time and expense.
- By eliminating the cleaning process and residual testing, single-use products reduce overall cost.
- Single-use products come with supporting documentation that ensures proper manufacturing standards were met.
- Single-use products are manufactured in ISO Class 7 clean rooms or higher.

Product Attributes

When considering using single-use products, it is important to work with a supplier that can provide products that meet your rigorous specifications and understands your complete supply-chain requirement from conceptual drawing to final use.

Understanding material of construction, fit and function, packaging and labeling requirements, as well as shipping and receiving documentation, are just a few examples of items to cross off your checklist.

We also recommend paying close attention to the temperature range, pH, and chemical compatibility of the product you intend to use.

Thomas offers sterile and non-sterile products (autoclavable, e-Beam, gamma irradiation, ETO) as well as different packaging varieties to meet the specific needs of your operation.

MTO and Custom Design products are assembled under Good Manufacturing Practices in general compliance with FDA Quality Systems Regulation (21 CFR820) and International Standard ANSI/ASQ/ISOQ9001-2008.

EZBIO®, Made-to-Order PC Bottle Assemblies, EZBio® Tubing

Foxx Life Sciences EZBio® Made To Order "MTO" Single Use Sterile Media Bottle Assemblies with Tubing and Vent Filters. Bottles available in Polycarbonate (PC), and EZBio® Tubing. EZBio® "MTO" Single Media Bottle Use Assemblies, allow the customer to select individual components suited for their project needs. Selectable components include Volume, and Brand of Fittings.



Click here for more information **EZBIO®**, **Made-to-Order PC Bottle Assemblies**, **EZBio® Tubing**



EZBio® Single Use Carboy Assembly

EZBio® PC Carboys' distinctive rectangular shape saves valuable bench space while the molded grips provide a secure hold to facilitate in lifting, handling, and pouring. With easy to read metric graduation marks, certified to $\pm 5\%$ accuracy, these carboys include pre-mounted, high tensile strength, platinum-cured silicone tubing. This assembly provides a 83B cap with flexible two-port filling and venting system, allowing for extractable free, aseptic gas and liquid transfer as required for pharmaceutical, biotechnology, and laboratory fluid transfer applications. These high-quality carboy assemblies are Sterile and readily able to accept additional fluid transfer components such as aseptic connectors, filters, and manifold integration.

Click here for more information **EZBio® Single Use Carboy Assembly**

Products & Partners

Supported by the Single-Use Program

Made-to-Order, Off-the-Shelf, and Custom Design...

You can purchase the components to make your own assembly, select "Off-the-Shelf" products that can be put together for you, or create your own Custom Design. Select the solution that works best for you!

Build Your Own Design

Powered by

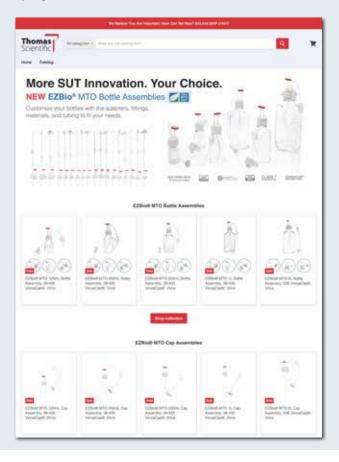


In partnership with Foxx Life Sciences, Thomas Scientific offers you the ability to "Build Your Own Design". You can do this by completing the Single-Use Solutions Form and sending it with your sketch to Single-Use@thomassci.com.

Foxx Life Sciences provides the technical expertise, version control, and validation information for all components and assemblies. Once the form is submitted, a consultation call will be scheduled with your local Thomas Scientific Account Manager and the Technical Team from Foxx Life Sciences. The Team will review the requirements, provide draft drawings, and make suggestions to streamline the process.

Refer to the Off-the-Shelf products available by searching for "MTO" on the Thomas Scientific Website for pricing and availability.

Contact your Thomas Scientific Account Manager or email <u>Single-Use@thomassci.com</u> for additional information about any of these programs.



Containers/Vessels

Bags Bottles Carboys Reactors Tank Liners

Tanks Sampling Tools

Pumps

Mixing Containers/ Equipment

Carboys

Oscillating Platform Mixer Rocking Platform Mixer Flasks

Centrifuges

Chemicals/Chromatography

USP-NF Grade Chemicals BP-EP-JP Grade Chemicals

pH Buffers Acids Salts Excipients

Ion Exchange, Mixed Mode,

Affinity Columns

Filtration

Syringe Capsule

Tangeritial Flow

Bottle Top Analytical Vacuum

Connectors/Fittings

Quick Connect and Disconnect

Aseptic Connectors

Luer Lock

"X", "Y", "T" Connectors

Sanitary NPT Flanges

Gaskets and Clamps

Tubing

Pharma Grade Silicone Pharma Grade Braided

Pump Tubing General Use

Cell Culture

Biological Buffers

Medical/Serum Supplements

Dishes Flasks Filter Units Roller Bottles Cell Factories Bioreactors

PPE Gloves Masks Labcoats

Sleeves Safety Glasses/Sterile Goggles

Coveralls
PAPR Systems

Thomas offers a large variety of products from a long list of vendors you trust.

Directly off the shelf and ready to ship, Thomas offers everything you need.













































Bioprocessing Innovations

HELIX Oscillating Biomixer

The patented HELIX Oscillating Biomixer® is a highly versatile mixer with multiple uses. We designed it as a pilot and small batch, self-mixing, closed system mixer that eliminates problems associated with traditional vessels. When used with our programmable Turn-Table, any mixing profile can be applied depending on the raw material characteristics. Low-shear, sensitive cellular work is possible with one program and difficult powder can be accomplished with another, all with the same equipment. The lightweight and leak-proof HELIX is constructed of Class VI polypropylene and can be sterilized in an autoclave and there is no need to open after components are charged thus minimizing contamination risk.



Click here for more information and a video demonstration **HELIX Oscillating Biomixer**



PharmaFocus® Premium Peristaltic Pump Tubing

PharmaFocus® Premium Peristaltic Pump Tubing is a high purity silicone tubing specifically designed for peristaltic pumps and pinch valves and is ideal for demanding pumping applications. Our Peristaltic Pump Tubing undergoes a stabilization process unique to Freudenberg Medical that provides the additional benefits of superior strength, performance, and longer life.

Click here for more information PharmaFocus® Premium Peristaltic Pump Tubing

CHEM+NECT™ bag

Designed to provide a closed system delivery option of introducing reagents into a clean and microbiological-controlled process. The CHEM+NECT™ bag is a sanitary and more environmentally sustainable alternative to glass and plastic bottles. The CHEM+NECT™ bag is ideal for processes in which pumping minor volumes of reagents and chemicals is used.



Click here for more information CHEM+NECT™ bag



CPC® AseptiQuik G Connector, Hose Barb Genderless

Genderless AseptiQuik® G connectors enable quick and easy sterile connections, even in non-sterile environments. The connectors' robust construction provides enhanced user confidence and reliable performance without the need for clamps, fixtures or tube welders. Biopharmaceutical manufacturers benefit from a full range of interchangeable 1/4" to 3/4" flow solutions with the quality and market availability they expect from the leader in single-use connection technology.

Click here for more information CPC® AseptiQuik G Connector, Hose Barb Genderless

Get Started Today! Contact Your Local Thomas Scientific Sales Representative, or email: Single-Use@thomassci.com





ThomasSci.com 833.544.SHIP (7447) Connect With Us:







