

Critical environment products

Where clean is critical—every container, every time



Your container should only hold what you need—nothing more

Certified clean containers for critical environments

Working within a critical environment such as a clean room necessitates high-quality materials and equipment since contamination can quickly spell disaster for what are typically exceedingly sensitive applications. It is therefore essential that products used in your critical environments, such as plastic bottles, vials, carboys, caps, and other materials, conform to the necessary standards of cleanliness.

Leave the cleaning of your containers to us

In addition to our manufacturing capabilities, which meet the needs of multiple cleanliness and validation options, Thermo Fisher Scientific offers specialty service capabilities for delivering the appropriate level of cleanliness for your process. We have the ability to clean glass or plastic containers (up to 115 L), stoppers, closures, and other component parts. It has never been easier for you to:

- Choose from our wide range of Thermo Scientific[™] products
- · Send us your materials
- Ask us to order other products for you

All services and packaging are performed in our ISO 9001–registered facility using certified Class 100 clean rooms with documented traceability.

We can meet your precise specifications and requirements with our clean processing service capabilities, offering a broad combination of cleanliness parameters and certifications, as well as custom packaging options.

Certificate definitions	
Certificate of Conformance	Certificates provided for base products (vials, bottles, carboys, and components) from the original manufacturer
Certificate of Processing	Certifies that a product was processed according to indicated methods
Certificate of Analysis	Certifies that a product was processed and tested according to laboratory procedures or validated protocols such as USP <788>

Our services help enable cleaner products

Particulate washing

High-purity water is filtered to submicron levels for particulate cleaning, resulting in a product with less than 1/3 of the allowable particulates according to USP <788> and endotoxin levels below 0.25 EU/mL. Particulate cleaning, combined with packaging and sterilization services, alleviates contamination concerns when used in production, for bulk drug storage, and when filtration is not possible. Your single-use critical-containment products are ready to use.

Packaging

Our customized packaging services include double or triple bagging in the quantity and configuration of your choice. Packaging is performed in a Class 100 (ISO Class 5) clean room environment or better.

Sterilization

We offer a number of sterilization services to effectively destroy all viable forms of life, including the option of a validated sterility assurance level (SAL) of 10⁻⁶. Services include gamma irradiation, e-beam, or autoclave (steam) options. Validation, packaging integrity, shelf-life studies, and ship testing can all be part of the customized services package. Depending on the criticality and intended use of a custom processed item, you may choose lot/batch sterility testing (USP 71), foregoing a formal product validation. USP 71 demonstrates that articles are free from microbial contamination. Successful completion of the test is reported as "No Growth."

Depyrogenated glass and depyrogenation

We process glass vials and other containers to meet requested endotoxin levels according to USP <85>. Cleaning and packaging are performed inside a Class 100 clean room. Depyrogenated vials and containers may also be requested with additional certifications to meet your unique needs.

Low total organic carbon

Total organic carbon (TOC) is a measure of the amount of covalently bound, organic molecules in a water sample. TOC vials can be cleaned and certified to contain fewer than 10 parts per billion (ppb) TOC as background.

Chemical cleaning for trace analysis

Choose from a combination of several different cleaning methods developed for removal of trace inorganic, trace organic, volatile organic, or total organic carbon residues, all available with clean room packaging or standard packaging. Cleaning and certification services are available for many parameters, including:

- Trace inorganics (metals)
- Trace volatile organic compounds
- · Particle counting
- · Trace semi-volatile organic compounds
- Trace organic carbon
- Trace pesticides and herbicides

Thermo Scientific™ Processing Services have the flexibility to meet your container cleanliness requirements. We have the capability to clean glass or plastic containers, stoppers, closures, or other component parts. Decide early what level of validation is required based on product use, and work closely with us to define specifications and requirements. With a Certificate of Conformance, Certificate of Processing, and Certificate of Analysis available based on your level of cleaning needs. Let us be your source so that you can focus on internal processes.

Low-particulate containers

Particulate-certified glass containers

Containers are assembled with low-shedding polypropylene closures with chemically inert PTFE-faced liners that do not contain adhesives. Both clear and amber glass products are available. Features include:

- Containers and closures are cleaned in proprietary HEPA-filtered washing and drying equipment
- Clean-packaged in Class 10 HEPA filtered workstations inside our Class 100 clean room
- Certified to contain as few as 5 particles/mL ≥0.5 microns
- Other container sizes and materials that meet and exceed USP <788> requirements are available as custom options by contacting your sales representative

- Sampling for quality control (QC)
- · Pharmaceutical and biotech use





Particulate-certified glass containers

Description	Capacity	С	losure	OD	x H*	No./	Cat. No.
Description	oz (mL)	Size	Liner	mm	in.	case	Cat. No.
Amber glass wide-mouth bottle with closed-top polypropylene closure (<20 particles/mL at 0.5 microns)	0.5 (15)	28-400	PTFE	30.93 x 50.39	1.218 x 1.984	57	130-005/LP
Clear glass vial with open-top closure, particulate-cleaned (≤10 particles/mL at 0.5 microns)	1.35 (40)	24-414	PTFE/silicone Septa	27.5 x 95.00	1.08 x 3.74	90	140-40C/LP
Amber glass Boston round bottle with open-top closure (≤10 particles/mL at 0.5 microns)	2 (60)	20-400	PTFE/silicone Septa	38.50 x 93.66	1.516 x 3.688	24	114-060A/LP
Amber glass packer bottle with lined closure (≤10 particles/mL at 0.5 microns)	2 (60)	33-400	PTFE	44.45 x 76.20	1.75 x 3.00	24	120-02A/LP
Clear glass Boston round bottle with closed-top closure (≤5 particles/mL at 0.5 microns)	4 (125)	24-414	PTFE/silicone	47.63 x 111.13	1.875 x 4.375	12	114-125CT/LP
Amber glass Boston round bottle with closed-top closure (≤5 particles/mL at 0.5 microns)	4 (125)	22-400	PTFE/silicone	47.63 x 111.13	1.875 x 4.375	12	114-125A/LP
Amber glass packer bottle with PTFE-lined closure (≤10 particles/mL at 0.5 microns)	4 (125)	38-400	PTFE	53.975 x 95.25	2.125 x 3.75	12	120-04A/LP
Clear glass Boston round bottle with closed-top closure (≤5 particles/mL at 0.5 microns)	8 (250)	24-414	PTFE/silicone	60.33 x 136.53	2.375 x 5.375	24	114-250C/LP
Amber glass Boston round bottle with closed-top closure (≤5 particles/mL at 0.5 microns)	8 (250)	24-400	PTFE/silicone	60.33 x 138.25	2.375 x 5.443	12	114-250A/LP
Amber glass wide-mouth packer bottle with closure (≤5 particles/mL at 0.5 microns)	8 (250)	45-400	PTFE	65.10 x 119.075	2.563 x 4.688	12	121-08A/LP
Clear glass jar, wide-mouth, with closure (≤5 particles/mL at 0.5 microns)	16 (500)	89-400	PTFE	90.88 x 96.04	3.578 x 3.781	12	132-16C/LP
Amber glass Boston round bottle with closure (≤5 particles/mL at 0.5 microns)	16 (500)	28-400	PTFE	76.20 x 168.28	3.00 x 6.625	12	113-500A/LP
Amber glass wide-mouth packer bottle with closure (≤5 particles/mL at 0.5 microns)	16 (500)	53-400	PTFE	80.57 x 146.05	3.172 x 5.75	12	122-16A/LP
Amber glass Boston round bottle with closure (≤5 particles/mL at 0.5 microns)	32 (1,000)	33-430	PTFE/silicone	95.25 x 215.90	3.75 x 8.50	12	112-01A/LP
Clear glass jar, wide-mouth with closure (≤5 particles/mL at 0.5 microns)	32 (1,000)	89-400	PTFE	95.25 x 169.85	3.75 x 6.69	12	133-32C/LP
Amber-fluorinated glass jug with closure (≤10 particles/mL at 0.5 microns)	84 (2,500)	38-439	PTFE/silicone	133.4 x 305	5.25 x 12.00	6	110-80A/LP
Amber glass wide-mouth packer bottle with closure (≤5 particles/mL at 0.5 microns)	84 (2,500)	70-400	PTFE	139.70 x 238.13	5.50 x 9.375	4	123-80A/LP
Amber glass jug with closure (≤5 particles/mL at 0.5 microns)	128 (4,000)	38-439	PTFE/silicone	158.75 x 336.55	6.25 x 13.25	4	111-04A/LP

 $^{^{\}star}$ Dimensions are approximate and may vary slightly.

Low-particulate containers

Particulate-certified HDPE containers

HDPE bottles with polypropylene closures are leakproof* and suitable for use in sampling packaging, and may be used with combination packaging for hazardous shipping. The bottles are double-bagged; low-metal certification includes aluminum, calcium, copper, iron, potassium, magnesium, manganese, sodium, and zinc at <10 ppb each.

Applications

- Sampling for stability studies
- Pharmaceutical and biotech use
- Plastic certified to contain as few as 20 particles/mL ≥0.5 microns

Description	Capacity Closure OD x H*		x H**	No./	Cat. No.		
Description	oz (mL)	(mL) size	in.	mm	case	Cat. No.	
HDPE narrow-mouth Thermo Scientific™ Nalgene™ Bottle with closure							
	4 (125)	24-415	2.00 x 4.00	50.80 x 101.60	24	156-125W/N/LP	
	8 (250)	24-415	2.50 x 5.25	63.50 x 133.35	24	157-250W/N/LP	
	32 (1,000)	38-430	3.625 x 8.50	92.08 x 215.90	12	150-01W/N/LP	
HDPE narrow-mouth Thermo Scientific™ Nalgene™ Bottle with closure, low metals							
	4 (125)	24-415	2.00 x 4.00	50.80 x 101.60	24	156-125W/N/LPM	
	32 (1,000)	38-430	3.625 x 8.50	92.08 x 215.90	12	150-01W/N/LPM	

^{*} Our guarantee for a leakproof seal is subject to our standard product warranty, as set forth in the Thermo Fisher Scientific Terms and Conditions of Sale.

Our products are leakproof at ambient temperature and pressure when used with their corresponding closures. However, to ensure safe usage, customers are advised to test our containers and closures under conditions of their planned application.



Depyrogenation

Depyrogenated glass

Save the need to invest in expensive capital equipment with ready-to-use depyrogenated glassware in a wide variety of sizes and configurations. The containers have been specially prepared to meet endotoxin levels of <0.06 EU/mL. Features include:

- Designed to meet low-endotoxin container needs for terminal sterilization or endotoxin-limited environments
- Testing performed according to USP <85>
- Containers and closures cleaned in proprietary
 HEPA-filtered washing equipment with low-endotoxin water;
 glass to be followed by a 25°C depyrogenation cycle
- Clean-packaged in Class 10 (ISO Class 4)
 HEPA filter-equipped workstations inside our
 Class 100 (ISO Class 5) clean room

- Packaging and storage of articles that will be terminally sterilized
- Storage of laboratory reagents and media
- Sample storage
- Water sampling





Depyrogenated glass

Description	Capacity	Closure		OD	x H*	No./	Cat. No.	
	oz (mL)	Size	Liner	in.	mm	case	Jan. No.	
Clear glass vial with urea closure	0.12 (4)	13-425	PTFE	0.583 x 1.772	14.8 x 45.00	72	23-CTP4/PF	
Clear glass vial with closed-top black polypropylene closure	0.68 (20)	24-400	PTFE/ silicone	1.083 x 2.244	27.50 x 57.00	72	139-20C/CT/LP/PF	
Clear wide-mouth glass straight-side jar with closure	2 (60)	53-400	PTFE	2.2 x 1.9	55.88 x 48.26	24	130-02C/PF	
Amber wide-mouth glass jar with closure	2 (60)	33-400	PTFE	1.75 x 2.968	44.45 x 75.39	24	C20-02A/PF	
Amber wide-mouth short glass straight-side jar with closure	4 (125)	58-400	PTFE	2.25 x 2.75	57.15 x 69.85	24	130-04A/PF	
Clear wide-mouth short glass straight-side jar with closure	4 (125)	58-400	PTFE	2.359 x 2.702	59.92 x 68.63	24	130-04C/PF	
Clear tall wide-mouth glass jar with closure	4 (125)	48-400	PTFE	2.00 x 4.00	50.80 x 101.60	24	130-04C/TL/PF	
Amber glass straight-side wide-mouth jar	8 (250)	70-400	PTFE	2.875 x 3.5	73.03 x 88.90	24	131-08A/PF	
Clear glass wide-mouth bottle with closure	32 (1,000)	89-400	PTFE	3.75 x 6.687	95.25 x 169.85	12	133-32C/PF	
Clear glass straight-side wide-mouth jar								
	8 (250)	70-400	PTFE	2.875 x 3.5	73.03 x 88.90	24	131-08C/PF	
	16 (500)	89-400	PTFE	3.578 x 3.781	98.87 x 90.88	12	132-16C/PF	
Amber glass wide-mouth packer bottle with	closure							
	4 (125)	38-400	PTFE	2.125 x 3.75	53.98 x 95.25	24	C20-04A/PF	
	8 (250)	45-400	PTFE	2.563 x 4.688	65.100 x 119.075	12	121-08A/PF	
	16 (500)	53-400	PTFE	3.172 x 5.75	80.57 x 146.05	12	122-16A/PF	
	32 (1,000)	53-400	PTFE	3.89 x 7.00	98.81 x 177.8	12	123-32A/PF	
	40 (1,200)	70-400	PTFE	7.500 x 4.125	190.50 x 104.78	24	123-40A/PF	
	84 (2,500)	70-400	PTFE	5.50 x 9.375	139.70 x 238.13	4	123-80A/PF	
Clear glass wide-mouth bottle								
	64 (2,000)	83-400	PTFE	5.00 x 8.50	127.00 x 215.90	6	117-2L/PF	
	128 (4,000)	110-400	PTFE	6.145 x 9.953	156.08 x 252.81	4	117-4L/PF	

 $[\]ensuremath{^*}$ Dimensions are approximate and may vary slightly.

Depyrogenation

Sterile vials

Certified as both depyrogenated and sterile, and available in sizes from 1 mL to 100 mL, sterile vials are Type 1 borosilicate, assembled with butyl stoppers and aluminum seals.

Applications

- Packaging and storing articles that will be terminally sterilized
- Storing laboratory media and reagents
- Sample storage
- Water sampling (where an aseptic protocol is required)

Description	Capacity	Closure size (mm)	OD x H*		No./	Cat. No.		
Description	oz (mL)		in.	mm	case	Out. No.		
Clear glass vial preassembled with stopper and aluminum crimp seal								
	0.068 (2)	13	0.62 x 1.378	15.75 x 35	100	ST2-13		
	0.17 (5)	20	0.856 x 1.575	21.75 x 40	50	ST5-20		
	0.34 (10)	20	0.856 x 2.047	21.75 x 52	50	ST10-20		
	0.68 (20)	20	1.142 x 2.362	29 x 60	48	ST20-20		
	1.014 (30)	20	1.453 x 2.578	36.91 x 65.48	50	ST30-20		
	1.7 (50)	20	1.671 x 2.883	42.44 x 73.23	50	ST50-20		
	3.4 (100)	20	2.031 x 3.727	51.58 x 94.66	50	ST100-20		
Amber glass vial preassembled with stopper and aluminum	n crimp seal	'		'	'	,		
	0.068 (2)	13	0.62 x 1.378	15.75 x 35	100	ST2-13A		
	0.17 (5)	20	0.856 x 1.575	21.75 x 40	50	ST5-20A		
	0.34 (10)	20	0.856 x 2.047	21.75 x 52	50	ST10-20A		
	1.014 (30)	20	1.453 x 2.578	36.91 x 65.48	50	ST30-20A		
	1.7 (50)	20	1.671 x 2.883	42.44 x 73.23	50	ST50-20A		
	3.4 (100)	20	2.031 x 3.727	51.58 x 94.66	50	ST100-20A		

^{*} Dimensions are approximate and may vary slightly.

Total organic carbon

TOC-certified vials, TOC water, and other specialty waters

TOC-certified vials

Several sizes of containers are available, including the popular 40 mL autosampler vials—cleaned, certified, and ready to use. Simplify and reduce the cost of cleaning validations. Features include:

- Low background is perfect for preparation and storage of standards
- Each lot is tested and certified to contribute
 <10 or 20 ppb TOC background
- 40 mL vials fit most automated TOC instruments

Applications

- USP method <643> testing
- · Offline and grab sampling of high-purity water

TOC water and other specialty waters

TOC water and other specialty waters are packaged in pre-cleaned amber glass containers and are ideal for dilution of TOC testing samples. Processing includes reverse osmosis, activated carbon, and ultraviolet TOC reduction.

- Certified to contain <50 ppb TOC
- High-purity water exceeds 17 Megaohm (MOhm) resistivity
- Final water filtered through 0.05 micron hydrophobic membrane filters

- Sample and standard dilutions
- · Lab blank determination
- Equipment rinsing



TOC-certified vials, TOC water, and other specialty waters

Description	Capacity	cy Closure		OD x H*		No./	Cat. No.	
Description	oz (mL)	Size	Liner	in.	mm	case	Cat. No.	
TOC-certified vials								
Screw-thread glass tube (round bottom) silanized 16 x 125 (certified for <20 ppb for TOC)	0.6 (18)	15-425	PTFE/silicone septa	0.563 x 5.00	14.30 x 127	255	CT18-TOC	
Screw-thread glass tube (round bottom) silanized with closure 16 x 125 (certified for <10 ppb for TOC)	0.6 (18)	15-425	PTFE/silicone septa	0.563 x 5.00	14.30 x 127	255	CT18-TOC/LL	
Clear glass flat bottom tube with closure 18 x 100 (<20 ppb for TOC)	0. 58 (17)	15-425	PTFE/silicone septa	0.699 x 3.937	17.75 x 100.0	200	SCT-18100/TOC	
30 mL polysulphone tube with closure, TOC-cleaned only, no C of A	1 (30)	20-400	PTFE/silicone septa	1.02 x 3.74	26 x 95	100	3115-OTWS-2	
24-414 polypropylene cap, thin septa, TOC-cleaned only, no C of A	NA	24-414	PTFE/silicone septa	NA	NA	72	24-414/TS/WS-2	
Clear glass vial with closure, dust covers (certified for <20 ppb for TOC)	1.35 (40)	24-414	PTFE/silicone septa	1.083 x 3.740	27.50 x 95.00	72	40C-TOC	
Amber glass vial with closure, dust covers (certified for <10 ppb for TOC)	1.35 (40)	24-414	PTFE/silicone septa	1.083 x 3.740	27.50 x 95.00	144	40A-TOC/DB/LL	
Clear glass vial with closure, dust covers (certified for <20 ppb for TOC)	1.35 (40)	24-414	PTFE/silicone septa	1.083 x 3.740	27.50 x 95.00	144	40C-TOC/DB	
Clear glass vial with closure, dust covers (certified for <10 ppb for TOC)	1.35 (40)	24-414	PTFE/silicone septa	1.083 x 3.740	27.50 x 95.00	144	40C-TOC/DB/LL	
Clear glass vial (certified for <10 ppb for TOC)	1.35 (40)	24-414	PTFE/silicone septa	1.125 x 3.75	28.58 x 95.25	72	40C-TOC/LL	
Amber glass Boston round with closed-top closure (certified for <20 ppb TOC)	4 (125)	22-400	PTFE/silicone	1.875 x 4.375	47.63 x 111.13	12	S114-125A/TOC	
Amber glass Boston round with open-top polypropylene closure (certified for <20 ppb TOC)	8 (250)	24-414	PTFE/silicone septa	2.359 x 5.368	59.92 x 136.35	12	S114-250A/TOC	
Clear glass Boston round, open-top polypropylene closure (certified for <20 ppb TOC)	8 (250)	24-414	PTFE/silicone septa	2.359 x 5.368	59.92 x 136.35	24	S114-250C/TOC	
Clear Boston round bottle with closed-top closure (certified for <20 ppb TOC)	32 (1,000)	33-400	PTFE	3.797 x 8.531	96.44 x 216.69	12	1000C/TOC	
Amber Boston round glass bottle with closed-top closure (certified for <20 ppb TOC)	32 (1,000)	33-430	PTFE	3.797 x 8.531	96.44 x 216.69	12	1000A/TOC	
TOC water and other specialty waters								
Amber glass bottle with closure (filled)	32 (1,000)	33-430	PTFE/silicone	3.70 x 8.10	93.98 x 205.74	12	112-01A/CTOC	
Amber jug with closure (filled)	128 (4,000)	38-439	PTFE/silicone	6.25 x 13.25	158.75 x 336.55	4	111-04A/C-TOC	

^{*} Dimensions are approximate and may vary slightly.

Silanization

Silanized glassware products

Save time and minimize waste when performing quantitative analysis or storing materials. Surface deactivation treatments such as silanization may play an important role in preserving the integrity of certain materials or extracts stored in glass containers. It also helps to avoid alkalinization of contents, which may occur as carbonates leach from the glass with normal weathering. Pre-processed with a silanized surface deactivation treatment, these products are offered in convenient, ready-to-use clean packs. Features include:

- Provided as standard products or custom services
- Available as vials and culture tubes to minimize waste for quantitative analysis
- Treatment inhibits materials from adhering to the surface of the container, allowing for maximum recovery of trace analytes
- A methyl silylating agent is introduced by vapor phase deposition onto the surface of the disposable glassware
- Silylating agent reacts with active groups on surface of glass, effectively making them less reactive to stored nonaqueous materials

- Processing of materials prone to adhering to glass surfaces
- · Extraction glassware
- · Nonaqueous material storage



Silanized glassware products

Description	Capacity	ity Closure		OD	x H*	No./	Cat. No.
Description	oz (mL)	Size	Liner	in.	mm	case	Cat. No.
Amber glass vial 12 x 32 screw-thread closure	0.068 (2)	8-425	PTFE/foam	0.472 x 1.26	11.99 x 32.00	100	SAA-SV2-2
Clear glass vial 12 x 32 closed-top closure	0.068 (2)	8-425	PTFE/foam	0.472 x 1.26	11.99 x 32.00	100	SCA-SV2-2
Amber glass vial 12 x 32 closed-top closure	0.068 (2)	8-425	PTFE/foam	0.472 x 1.26	11.99 x 32.00	100	SCA-SV2-CT
Amber glass vial with closure	0.12 (4)	13-425	PTFE/foam	0.583 x 1.772	14.80 x 45.00	100	EP608154-S
Amber glass vial 15 x 45 closed-top closure	0.12 (4)	13-425	PTFE/foam	0.583 x 1.772	14.80 x 45.00	100	SAA-SV4-2
Clear glass vial 15 x 45 closed-top closure	0.12 (4)	13-425	PTFE/foam	0.583 x 1.772	14.80 x 45.00	100	SCA-SV4-2
Amber glass vial with closure	0.27 (8)	15-425	PTFE/foam	0.669 x 2.362	16.99 x 59.99	100	EP608158-S
Amber glass vial with solid closed-top septa closure	0.68 (20)	24-414	PTFE/silicone	1.083 x 2.244	27.50 x 57.00	72	C39-20A/CT-S
Clear glass vial with solid closed-top septa closure	0.68 (20)	24-414	PTFE/silicone	1.083 x 2.244	27.50 x 57.00	72	C39-20C/CT-S
Amber glass Boston round bottle with black closure	32 (1,000)	33-430	PTFE	3.797 x 8.531	96.44 x 216.69	12	212-01A-S
Glassware culture tubes, disposable Type 1 borosilicate glass, sold 1,000 per case, 2	250 per inner	pack					
Clear glass culture tubes 12 x 75 (closures are not included)	0.20 (6)	NA	NA	0.47 x 2.95	12 x 75	1,000	CTS-1275
Screw-thread glass tubes 13 x 100 (closures are not included)	0.27 (8)	13-415	NA	0.51 x 3.94	13 x 100	1,000	STT-13100-S
Clear glass culture tubes 13 x 100 (closures are not included)	0.34 (10)	NA	NA	0.51 x 3.94	13 x 100	1,000	CTS-13100
Screw-thread glass tubes 16 x 100 (closures are not included)	0.41(12)	15-415	NA	0.63 x 3.94	16 x 100	1,000	STT-16100-S
Clear glass culture tubes 16 x 100 (closures are not included)	0.51 (15)	NA	NA	0.63 x 3.94	16 x 100	1,000	CTS-16100
Screw-thread glass tubes 16 x 125 (closures are not included)	0.54 (16)	15-415	NA	0.63 x 4.92	16 x 125	1,000	STT-16125-S
Clear glass culture tubes 16 x 125 (closures are not included)	0.64 (19)	NA	NA	0.63 x 4.92	16 x 125	1,000	CTS-16125-2

 $^{^{\}star}$ Dimensions are approximate and may vary slightly.



Focus on what you do best and leave the cleaning to us

Didn't find an item in our catalog to fit your needs? We can customize a variety of containers, packaging, and processing products for you.

Custom particulate washing services

- Facility and quality management system certified under ISO 9001
- State-of-the-art water purification system used for rinse water—meets USP requirements for water for injection (WFI)
- · Colorless or amber glass or plastics
- Closures and components
- 100 µL to 115 L vials and containers
- Performed in Class 10 (ISO Class 4) HEPA-filtered workstations inside our Class 100 (Class 5) clean room

Packaging options

- Clean room bags, autoclave wrap, or autoclave bags
- · Low-shed trays available for small vials and bottles
- Heat seal, twist-tie, tape, zip-tie, and other closure methods
- Single-, double-, triple-layer packaging available
- · Carton choices include double-wall corrugate

Sterilization methods

- Dry heat
- · Gamma irradiation
- · Moist heat or autoclave
- Certificate of Analysis included meets USP sterilization criteria
- Other sterilization methods available upon request—ethylene oxide, e-beam, etc.

Other services

We offer any of our standard catalog item services on custom products as well. Please note, some services cannot be combined. Contact your sales representative for details. If you need assistance with further information or a quote, our customer service department is a phone call away

Standard and custom product offerings

Monday-Friday, 9:30 a.m.-5:30 p.m. ET US: 1-800-331-7425 International: 1-918-337-1600

Worldwide service available 24/7 weborders@thermofisher.com





