

# Bottles & Carboys



Experience the **TARSONS** factor!

# Tarsons

## Bottles and Carboys

Trust our Bottles & Carboys  
with your precious samples

Poor quality Bottles & Carboys destroy your samples with leachable contaminants.

Tarsons range of Bottles & Carboys are made with the purest grade of resins, making us the #1 Trusted Brand that scientists around the world prefer.

Choose from a wide range of quality containers you can trust, for all of your application requirements.



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# 10 Top reasons why Tarsons is reliable

1. Wide range of products
2. Complies with Regulatory Standards
3. Meets ISO 13485 & ISO 9001
4. High quality resins
5. Shatterproof construction
6. Leakproof guarantee
7. Economical choice
8. No leachability
9. Versatile pack size - Lab pack for laboratories & Bulk pack for production
10. Technical assistance provided

# The Tarsons Factor

## Leakproof Assurance

Tarsons Bottles and Closures feature a robust semi-buttress thread design. We provide a leak proof assurance, as both components are regularly manufactured and tested during our quality inspection process. Tarsons closures are liner-free, eliminating the risk of wear, corrosion, or contamination.

## Premium-Grade Resin

The Tarsons range of Bottles & Carboys are crafted from premium-grade resin that complies with pharmaceutical, laboratory, and food safety standards. We carefully choose our resins to limit additives and minimise potential leachables. By avoiding the use of plasticizers and fillers, we ensure a safe storage environment for your valuable samples.

## Shatter-Proof Secure

Plastics, an alternative to glass, have fewer trace element extractables compared to glass and are less prone to breakage. Tarsons' process of manufacturing amplifies this advantage by offering durable containers that provide the reliable protection your valuable work deserves.







# Tarsons

## Bottles and Carboys

### Wide Range Selection

Tarsons containers are made from a wide variety of plastic resins to meet virtually any laboratory application. Choices include chemically-resistant LDPE, HDPE, PETG, PET and autoclavable PP & PC offerings.

### Quality Reassured

Tarsons Bottles & Carboys are manufactured in certified ISO 13485 manufacturing facilities. We ensure quality products through rigorous testing, strict adherence to industry standards, and continuous process monitoring. Injection Blow-Moulding and Stretch Blow-Moulding ensures consistent wall thickness and enhanced durability in our products. Additionally, every manufacturing lot undergoes thorough inspection to meet the highest levels of precision and reliability.

### Standards Compliant

Most of our resins are DMF registered and meet a number of regulatory specifications, including: USP Class VI, EP monographs and EU food - contact directives, CONEG, REACH, RoHS, Melamine Free, Latex Free, BPA Free, Phthalate Free, GMO Free, CA Prop 65, SARA Title III Sec.313, and FDA 21 CFR pt 177; thus, making us a popular choice amongst global customers.

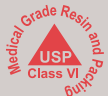
# Bottles

## Discover unmatched reliability

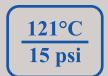
The Tarsons range of Bottles are the classic standard storage containers. They offer the ultimate solution in containment and protection. Available in 3 different resins, they are ensured to be leakproof, strong and durable.



### Symbol Glossary



USP Class VI certified medical grade resin



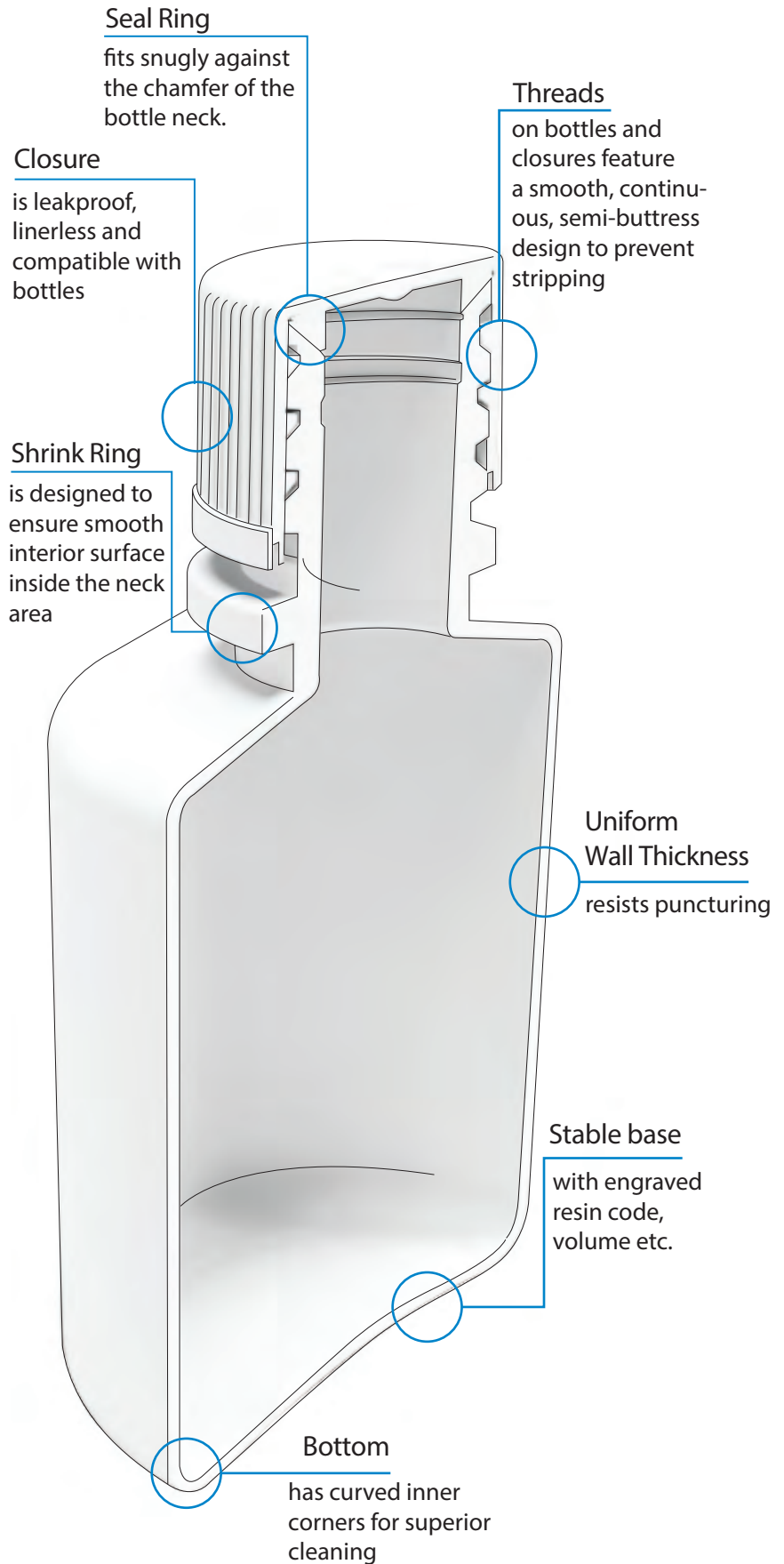
Can be autoclaved at 121°C, 15psi for 20 minutes



Suitable for contact with food stuffs



Indicates a medical device that has been sterilised using irradiation





### Narrow Mouth Bottle, PP with PP Closure

Material conforming to USP Class VI. Leakproof\*, low in trace elements, and Autoclavable with and without contents. Translucence provides good clarity for viewing contents. Comes in capacity ranges of 4-8000 mL.

Note: 2L, 4L & 8L bottles are available in Natural as well as amber color.

CAT for PP Amber Bottles: 585301 (2L), 585302 (4L), 585303 (8L)



### Narrow Mouth Bottle, LDPE with PP Closure

Material conforming to USP Class VI. Leakproof\*. Excellent flexibility, chemical resistance, and impact resistance. Contents are easily visible. Ideal for storing chemicals, standards, and distilled water. Good for freezer storage to -100°C.



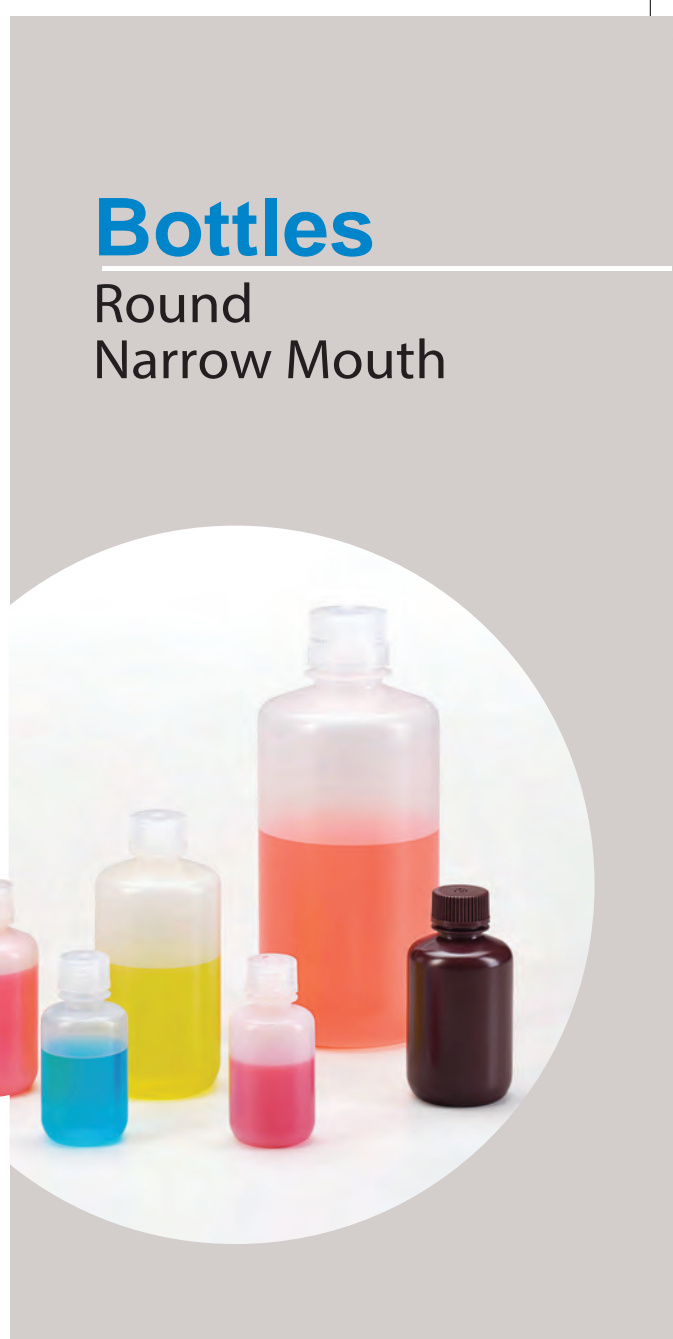
### Narrow Mouth Bottle, HDPE with PP Closure

Material conforming to USP Class VI. Low in trace elements. Leakproof\*. Rigid and excellent chemical resistance to most acids, bases, and alcohols. Ideal for storing, packaging, and shipping liquids. Good for freezer storage to -100°C.



### Amber Narrow Mouth Bottle, HDPE with PP Amber Closure

Material conforming to USP Class VI. Leakproof\*. Protects light-sensitive liquids. Rigid and excellent chemical resistance to most acids, bases, and alcohols. Ideal for storing, packaging, and shipping liquids. Good for freezer storage to -100°C



# Bottles

## Round Narrow Mouth

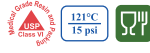
CAT# PP	CAT# LDPE	CAT# HDPE	CAT# HDPE Amber	Capacity (mL)	Capacity (oz)	Closure Size (mm)	Unit Pack	Case Pack
582070	x	583170	581170	4	1/8	13-415	12	72
582071	x	583171	581172	5	1/4	13-415	12	72
582080	586080	583180	581180	8	1/4	20-415	12	72
582090	586090	583190	581190	15	1/2	20-415	12	72
582091	x	583191	581191	20	1	20-415	12	72
582100	586200	583100	581200	30	1	20-415	12	72
582110	586210	583110	581210	60	2	20-415	12	72
582120	586220	583120	581220	125	4	24-415	12	72
582130	586230	583130	581230	250	8	24-415	12	72
582140	586240	583140	581240	500	16	28-415	12	48
582150	586250	583150	581250	1000	32	38-430	6	24
582180	586260	583160	x	2000	1/2	38-430	1	6
582160	586280	583173	x	4000	1	38-430	1	6
582190	586290	583174	x	8000	2	53B	1	6

\*Refer to Pg no 23 for Leakproof Statement

Note: 4L and 8L Narrow mouth bottles feature a built-in shoulder loop for attaching identification tag.

# Bottles

## Round Wide Mouth



### Wide Mouth Bottle, PP with PP Closure

Material conforming to USP Class VI. Low in trace elements. Leakproof\* & Autoclavable. Excellent chemical resistance. Autoclavable with or without contents. Provides good clarity for viewing content. Large bottles with handles are ideal for storing and sterilizing contaminated lab items. Not recommended for transporting liquids.

**NOTE:** Before autoclaving, set the closure on top of the container without engaging the threads.



### Wide Mouth Bottle, LDPE with PP Closure

Material conforming to USP Class VI. Leakproof\*. Excellent flexibility, chemical resistance, and impact resistance. Contents are easily visible. Good for freezer storage to -100°C.



### Wide Mouth Bottle, HDPE with PP Closure

Material conforming to USP Class VI. Low in trace elements. Leakproof\*. Rigid and excellent chemical resistance to most acids, bases, and alcohols. Ideal for storing, packaging, and shipping dry materials or liquids. Good for freezer storage to -100°C.



### Amber Wide Mouth Bottle, HDPE with PP Amber Closure

Material conforming to USP Class VI. Leakproof\*. Protects light-sensitive liquids. Rigid and excellent chemical resistance to most acids, bases, and alcohols. Ideal for storing, packaging, and shipping dry materials or liquids. Good for freezer storage.

CAT# PP	CAT# LDPE	CAT# HDPE	CAT# HDPE Amber	Capacity (mL)	Capacity (oz)	Closure Size (mm)	Unit Pack	Case Pack
Wide Mouth Bottle without handle								
582200	585200	584200	581300	30	1	28-415	12	72
582210	585210	584210	581310	60	2	28-415	12	72
582220	585220	584220	581320	125	4	38-415	12	72
582230	585230	584230	581330	250	8	43-415	12	72
582240	585240	584240	581340	500	16	53-415	12	48
582250	585250	584250	581350	1000	32	63-415	6	24
582260	585260	584260	581360	2000	64	100-415	1	6
582270	585270	584270	581370	4000	128	100-415	1	6
Wide Mouth Bottle with handle								
583257	x	583357	x	4000 Round	1	100-415	1	6

**Note:** Bottles having 100-415 closures are not recommended for transporting liquids. Leak testing on closures of 100 mm done at ambient pressure.

\*Refer to Pg no 23 for Leakproof Statement





### Wide Mouth Square Bottle, PP with PP Closure

Leakproof\* and Space saving. Provides a Large labelling surface. Easy to fill and clean. Resistant to acids, alcohols, and bases. Provides good clarity for contents.

**NOTE:** Before autoclaving, set the closure on top of the container without engaging the threads.



### Wide Mouth Square Bottle, HDPE with PP Closure

Leakproof\*. Rigid and excellent chemical resistance to most acids, bases, and alcohols. Save space. Provides a Large labeling surface. Ideal for storing, packaging, and shipping dry materials or liquids. Good for freezer storage to -100°C.



### Amber Wide Mouth Square Bottle, HDPE with PP Amber Closure

Leakproof\*. Protects light-sensitive liquids. Rigid and excellent chemical resistance to most acids, bases, and alcohols. Save space. Provide a Large labeling surface. Ideal for storing, packaging, and shipping dry materials or liquids. Good for freezer storage to -100°C



### Rectangular Wide Mouth Bottle, HDPE with PP Closure

Leakproof\*. Rigid and excellent chemical resistance to most acids, bases, and alcohols. Save space. Provides a Large labelling surface. Ideal for storing, packaging, and shipping dry materials or liquids



### Amber Rectangular Wide Mouth Bottle, HDPE with PP Amber Closure

Leakproof\*. Protects light-sensitive liquids. Rigid and excellent chemical resistance to most acids, bases, and alcohols. Save space. Provide a Large labelling surface. Ideal for storing, packaging, and shipping dry materials or liquids. Good for freezer storage to -100°C.



# Bottles

## Square & Rectangular

SQUARE			RECTANGULAR			Capacity (mL)	Capacity (oz)	Closure Size (mm)	Unit Pack	Case Pack
CAT# PP	CAT# HDPE	CAT# HDPE Amber	CAT# HDPE	CAT# HDPE Amber						
Bottle without handle										
582221	584221	585221	x	x	60	2	28-415	12	72	
x	x	x	583320	583420	125	4	28-415	12	72	
582222	584222	585222	x	x	175	6	38-415	12	72	
x	x	x	583330	583430	250	8	38-415	12	72	
582223	584223	585223	x	x	250	8	43-415	12	72	
x	x	x	583340	583440	500	16	48-415	12	48	
582224	584224	585224	x	x	500	16	53-415	12	48	
x	x	x	583350	583450	1000	32	53-415	6	24	
582225	584225	585225	x	x	1000	32	63-415	6	24	
Bottle with handle										
x	x	x	583360	583460	2000	64	63-415	4	12	
583258	583358	x	x	x	4000	128	100-415	1	6	

**Note:** Bottles having 100-415 closures are not recommended for transporting liquids. Leak testing on closures of 100 mm done at ambient pressure.

\*Refer to Pg no 23 for Leakproof Statement

# Bottles

## Bulk Pack

We offer a variety of Bulk packaging options for our Bottles designed to meet the needs of Production industries like Biologicals, Specialty Chemicals, Diagnostics, Food, Pharmaceuticals, Veterinary Pharmaceuticals, etc. This helps streamline large-scale operations by providing secure, efficient, and cost-effective ways to transport and store Bottles. Additionally, Bulk packaging minimizes the risk of damage during transit, reduces overall waste, and supports eco-friendly practices.



### KEY ADVANTAGES

- ✓ Our Bottles and Closures are separately packed in double bags and then packed inside a cardboard box, for maximum safety and ultimate protection against contamination, which fulfils Cleanroom production requirements.
- ✓ This ensures secure delivery of large quantities while maintaining product integrity.
- ✓ With options that can be customized to meet specific production requirements, this ensures that all products, from Bottles to Carboys, arrive safely and ready for immediate use in Production process.
- ✓ This style of packaging proves advantageous for Automation processes where auto filling, auto capping, and pouring technologies are used.

### Narrow Mouth Round Bottles - Bulk Pack

CAT# PP	CAT# LDPE	CAT# HDPE	CAT# HDPE Amber	Capacity (mL)	Capacity (oz)	Closure Size (mm)	Unit Pack	Case Pack
580100	x	587100	589100	4	1/8	13-415	2000	2000
x	x	587105	x	5	1/6	13-415	2000	2000
580110	x	587110	589110	8	1/4	20-415	2000	2000
580120	588120	587120	589120	15	1/2	20-415	2000	2000
580130	588130	587130	589130	30	1	20-415	1000	1000
580140	588140	587140	589140	60	2	20-415	1000	1000
580150	588150	587150	589150	125	4	24-415	500	500
580160	588160	587160	589160	250	8	24-415	250	250
580170	588170	587170	589170	500	16	28-415	125	125
580180	588180	587180	589180	1000	32	38-430	50	50

### Wide Mouth Round Bottles - Bulk Pack

CAT# PP	CAT# LDPE	CAT# HDPE	CAT# HDPE Amber	Capacity (mL)	Capacity (oz)	Closure Size (mm)	Unit Pack	Case Pack
582211	585211	584211	581311	30	1	28-415	1000	1000
582212	585212	584212	581312	60	2	28-415	1000	1000
582213	585213	584213	581313	125	4	38-415	500	500
582214	585214	584214	581314	250	8	43-415	250	250
582215	585215	584215	581315	500	16	53-415	125	125
582216	585216	584216	581316	1000	32	63-415	50	50

# Bottles

## Heavy Duty Vacuum



### Heavy Duty Vacuum Bottle, PP with White PP Closure & TPE Gasket

Material conforming to USP Class VI. Leakproof\* & Autoclavable. Large Bottle with thick wall. Excellent chemical resistance. Ideal for vacuum trap. Compatible with Filling / Venting Closure. Withstands full vacuum for 24 hours.

**NOTE:** Before autoclaving, set the closure on top of the container without engaging the threads.



### Heavy Duty Vacuum Bottle, HDPE with White PP Closure & TPE Gasket

Material conforming to USP Class VI. Leakproof\*. Large Bottle with thick wall. Excellent chemical resistance. Ideal for vacuum trap. Compatible with Filling / Venting Closure. Withstands full vacuum for 24 hours.

CAT# PP	CAT# HDPE	Capacity (L)	Capacity (Gals)	Closure size (mm)	Unit Pack	Case Pack
582258	x	1	1/4	53B	1	6
583255	582256	2	1/2	53B	1	6
582255	582257	4	1	83B	1	6

\*Refer to Pg no 23 for Leakproof Statement

# Bottles

## Sterile Individually Wrapped



Material conforming to USP Class VI. Gamma Sterile & Low in trace elements. Leakproof\*. Rigid and excellent chemical resistance to most acids, bases, and alcohols. Good for freezer storage to -100°C. Amber bottle protects light-sensitive liquids. Product code with suffix S denotes Sterile. Product code with suffix SP denotes Sterile- Pyrogen Free. Product code with suffix SPG denotes Sterile-Pyrogen Free with Graduation Marking. Bottles are Individually wrapped with poly bag having Gamma Indicator Label, Lot No & Cat No.

### STERILE INDIVIDUALLY SINGLE WRAPPED WIDE MOUTH BOTTLE, HDPE WITH PP CLOSURE

Non-graduated, Sterile		Non-graduated, Sterile & Pyrogen Free		Graduated, Sterile & Pyrogen Free	Capacity (mL)	Capacity (oz)	Closure Size (mm)	Unit Pack	Case Pack
CAT# HDPE	CAT# HDPE Amber	CAT# HDPE	CAT# HDPE Amber	CAT# HDPE					
584200S	581300S	584200SP	581300SP	x	30	1	28-415	1	500
584210S	581310S	584210SP	581310SP	584210SPG	60	2	28-415	1	250
584220S	581320S	584220SP	581320SP	584220SPG	125	4	38-415	1	125
584230S	581330S	584230SP	581330SP	584230SPG	250	8	43-415	1	60
584240S	581340S	584240SP	581340SP	584240SPG	500	16	53-415	1	30
584250S	581350S	584250SP	581350SP	x	1000	32	63-415	1	24
584260S	581360S	584260SP	581360SP	x	2000	64	100-415	1	12
584070S	x	x	x	x	4000	128	100-415	1	6

### Codes for Ordering Single Wrapped, Double wrapped and Triple wrapped Individual Sterile Bottles

For Single wrapped Individual Sterile Bottles	Add suffix S after the Cat No	584200S
For Double wrapped Individual Sterile Bottles	Add suffix S2 after the Cat No	584200S2
For Triple wrapped Individual Sterile Bottles	Add suffix S3 after the Cat No	584200S3
For Single wrapped Individual Sterile Pyrogen Free Bottles	Add suffix SP after the Cat No	584200SP
For Double wrapped Individual Sterile Pyrogen Free Bottles	Add suffix S2P after the Cat No	584200S2P
For Triple wrapped Individual Sterile Pyrogen Free Bottles	Add suffix S3P after the Cat No	584200S3P
For Single wrapped Individual Sterile Pyrogen Free, Graduated Bottles	Add suffix SPG after the Cat No	584200SPG
For Double wrapped Individual Sterile Pyrogen Free, Graduated Bottles	Add suffix SP2G after the Cat No	584200SP2G
For Triple wrapped Individual Sterile Pyrogen Free, Graduated Bottles	Add suffix SP3G after the Cat No	584200SP3G

### STERILE INDIVIDUALLY TRIPLE WRAPPED NARROW MOUTH BOTTLES, HDPE with PP Closure (Non-graduated)

CAT# HDPE	Capacity (mL)	Capacity (oz)	Closure Size (mm)	Unit Pack	Case Pack
583120S3	125	4	38-415	1	125
583140S3	500	16	28-415	1	30

Note: The label containing information for Cat No., Lot No., expiry date and  $\gamma$  indicator is fixed on the primary layer.

\*Refer to Pg no 23 for Leakproof Statement







## Sterile Round Diagnostic Bottles, PETG, with white HDPE closure

Material conforming to USP Class VI. Leakproof\*, Free of detectable pyrogens, RNase, and DNase, non-cytotoxic. Meets USP light-resistant requirements. Available in three types- PETG, PETG Amber and PC.



## Sterile Amber Round Diagnostic Bottles, PETG, with amber HDPE closure

PETG bottles are gamma sterile, packed in shrink wrapped trays and are ideal for sampling, storage, and leakproof\* shipment of reagents, light sensitive liquid media, API, bulk intermediates, pH-sensitive liquids and sera.



## Autoclavable Round Diagnostic Bottles, PC with PP closure

PC bottles with PP closure are autoclavable and good for freezer storage up to -135°C. They are ideal for the production and leakproof\* packaging of steam sterilized biologicals such as sera, veterinary, pharmaceuticals, cosmeceuticals, nutraceuticals and essential oils.

**Note: Remove the cap or completely disengage threads before autoclaving. Repeated autoclaving will shorten bottle life.**



Tamper evident closures also available  
(Refer to Pg. 22 for further information)

STERILE ROUND DIAGNOSTIC BOTTLES					
CAT# PETG	CAT# PETG Amber	CAT# PC	Capacity (mL)	Closure size (mm)	QTY per Tray/Pack
581701	X	581707	5	20-415	20/100
581702	581705	581708	10	20-415	20/100
581703	X	X	20	20-415	20/100

Non - Sterile

Note: Customisation of packing, cap colour, etc. is available.

\*Refer to Pg no 23 for Leakproof Statement

# Diagnostic Bottles

## Round Sterile

# Media Bottles

## Square Graduated Sterile



Material conforming to USP Class VI. Leakproof\*, **Free of detectable Pyrogens, RNase, and DNase, Non-Cytotoxic.** Amber Bottles meet USP light-resistant requirements. Available in the following types - PETG, PETG Amber, PETG with HDPE/TPE septum closure, PC, and PET. Available in Tray Pack (TP) and Individual Pack (IP). PETG bottles are gamma sterile, packed in shrink-wrapped trays and have heat-shrink band around closure and neck. PC bottles with PP closure are autoclavable and good for freezer storage up to -135°C. PET bottles are gamma sterile, packed in shrink-wrapped trays. These are ideal for storage and shipping of liquid media, buffers, reagents, light sensitive liquid media and sera with excellent gas barrier properties. We also offer sterile individually packed media bottles for all three variants.

### SQUARE GRADUATED MEDIA BOTTLES - Tray Pack

CAT# PETG Sterile-TP	CAT# PETG Amber Sterile-TP	CAT# PETG with Septum Closure Sterile -TP	CAT# PC Autoclavable Non-Sterile-TP	CAT# PET Sterile-TP	CAT# PC Gamma Stable-TP	Capacity (mL)	Closure size (mm)	QTY per Tray/Pack
581410	581430	x	581400	x	581400GS	30	20-415	24/96
581411	581431	581421	581401	x	581401GS	60	24-415	24/96
581412	581432	581422	581402	x	581402GS	125	38-430	24/48
x	x	x	x	581610	x	125	38-430	24/96
581413	x	581423	581403	x	581403GS	250	38-430	24/48
x	x	x	x	581611	x	250	38-430	30/60
581414	x	581424	581404	x	581404GS	500	38-430	12/24
x	x	x	x	581612	x	650	38-430	24/48
581415	x	581425	581405	581613	581405GS	1000	38-430	12/24
581416	x	x	581406	x	581406GS	2000	53B	6/12

### STERILE SQUARE GRADUATED MEDIA BOTTLES - Individual Pack

CAT# PET Sterile-IP	CAT# PETG Sterile-IP	CAT# PC Sterile-IP	CAPACITY (mL)	Closure size (mm)	QTY per Pack/Case
x	581440	581450	30	20-415	1/96
x	581441	581451	60	24-415	1/96
581620	x	x	125	38-430	1/96
x	581442	581452	125	38-430	1/48
581621	x	x	250	38-430	1/60
x	581443	581453	250	38-430	1/48
x	581444	581454	500	38-430	1/24
581622	x	x	650	38-430	1/48
581623	581445	581455	1000	38-430	1/24
x	581446	581456	2000	53B	1/12

#### Non - Sterile

Note: Gamma indicator label on bottle's outer surface. Customisation of packing, cap colour, etc. is also available.

\*Refer Pg no 23 for Leakproof Statement

IP=Individually Packed  
TP=Tray Packed



STERILE R



= Only for PC

Material conforming to USP Class VI. **Non-cytotoxic and free of detectable pyrogens.** Graduated. Individually packed. Ideal for the safe storage and transport of vaccines, biopharmaceuticals, culture media, and other biotech materials in life science industries.

Moulded-in graduations with 500 mL/ 0.5-gallon increments in 5 L; 500 mL/ 1-gallon increments in 10 L and 1 L/ 1-gallon increments in 20 L. PC withstands -80°C to 121°C. PET withstands -40°C to 65°C. PETG withstands -40°C to 70°C

# Biocanisters

## Square Graduated Sterile

### STERILE SQUARE BIOCANISTERS

CAT# PC	CAT# PETG	CAT# PET	Capacity (L)	Closure size (mm)	QTY per Pack/Case
581407	581417	X	5	63	1/6
581408	X	581418	10	63	1/4
581409	X	581419	20	63	1/2

### NON-STERILE GAMMA STABLE SQUARE BIOCANISTERS

CAT# PC	CAT# PETG	CAT# PET	Capacity (L)	Closure size (mm)	QTY per Pack/Case
X	581417NS	X	5	63	1/6
X	X	581418NS	10	63	1/4
X	X	581419NS	20	63	1/2



= Only for PC



STERILE R

# Carboys

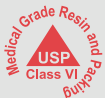
Find out what makes our Carboys unique



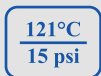
## Built-in Shoulders

are designed for carrying ease

## Symbol Glossary



USP Class VI certified medical grade resin



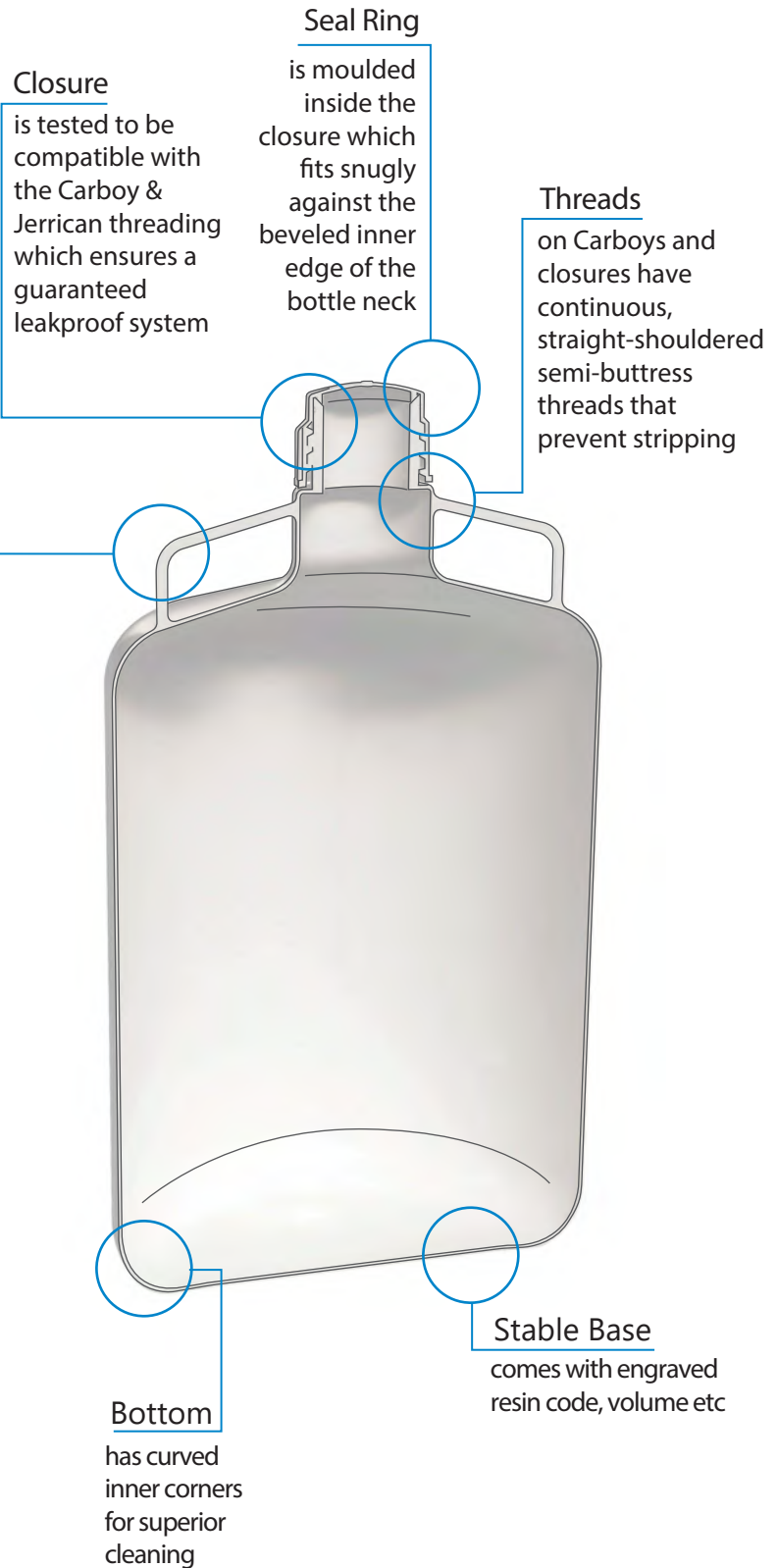
Can be autoclaved at 121°C, 15psi for 20 minutes



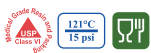
Suitable for contact with food stuffs



Indicates a medical device that has been sterilised using irradiation







## Polypropylene Carboy

- Leakproof PP screw-top design for guaranteed performance
- Graduated and Autoclavable
- Wide shoulder handle for easy carrying and pouring
- Heavy duty version for vacuum or extreme conditions
- Wide mouth version for easy cleaning, filling and dispensing
- Ideal for storing and transporting large batches of culture media, distilled water, and other solutions

### Recommended applications-

- ✓ Where autoclave-sterilization is required
- ✓ For Vacuum or extreme use conditions (Heavy-Duty Carboy)
- ✓ For liquid storage and transfer (Narrow Mouth Carboy)
- ✓ Solid or powder material storage (Wide-Mouth Carboy)
- ✓ Where bulk API storage is required
- ✓ For efficient use of storage space (Rectangular shape)
- ✓ For homogenous stirring (Round shape)

# Carboy PP

Perfect for in-house autoclaving



Code	Capacity L (gal)	Description	Closure Size (mm)	Body Dia (mm)	L x B (mm)	Height with closure (mm)	No per pk /cs
583250	10 (2.6)	Narrow Mouth Carboy-PP	83B	249	x	392	1/1
583251	15 (3.9)	Narrow Mouth Carboy -PP	83B	285	x	432	1/1
583260	20 (5.3)	Narrow Mouth Carboy-PP	83B	285	x	525	1/1
583261	25 (6.6)	Narrow Mouth Carboy-PP	83B	285	x	595	1/1
583270	50 (13.2)	Narrow Mouth Carboy-PP	83B	376	x	678	1/1
583265	10 (2.6)	Narrow Mouth Carboy Heavy Duty-PP	83B	249	x	385	1/1
583266	20 (5.3)	Narrow Mouth Carboy Heavy Duty-PP	83B	285	x	525	1/1
583351	10 (2.6)	Wide Mouth Carboy-PP	100-415	249	x	336	1/1
583272	15 (3.9)	Wide Mouth Carboy-PP	100-415	285	x	380	1/1
583361	20 (5.3)	Wide Mouth Carboy-PP	100-415	285	x	478	1/1
583279	5 (1.3)	Narrow Mouth Carboy with Spigot-PP	53B	181	x	365	1/1
583280	10 (2.6)	Narrow Mouth Carboy with Spigot-PP	83B	249	x	385	1/1
583290	20 (5.3)	Narrow Mouth Carboy with Spigot-PP	83B	285	x	525	1/1
583263	25 (6.6)	Narrow Mouth Carboy with Spigot-PP	83B	285	x	595	1/1
583300	50 (13.2)	Narrow Mouth Carboy with Spigot-PP	83B	376	x	675	1/1
583264	33 (8.7)	Narrow Mouth Carboy with Spigot-PP	83B	377	x	550	1/1
683240	5 (1.3)	Rectangular Carboy with Spigot-PP	100-415	x	229x144	340	1/1
683250	10 (2.6)	Rectangular Carboy with Spigot-PP	100-415	x	284x176	400	1/1
683260	20 (5.3)	Rectangular Carboy with Spigot-PP	100-415	x	340x209	500	1/1

#Pack size may vary for export customers.

Note: 83B and 53B Closures come with TPE gasket. Sterile Carboys are also available.

# Carboy & Jerrican

Ideal for aggressive conditions or chemicals



## High Density Polyethylene Carboy & Jerrican

- Leakproof PP screw caps for guaranteed performance
- Wide range including Heavy-duty for extra-aggressive conditions
- Amber for light-sensitive products
- Round for homogeneous stirring, Rectangular for efficient use of storage space
- Convenient shoulder or attached metal handles for easy carrying and pouring
- Graduations for volume determination at a glance

### Recommended applications-

- ✓ Media formulation and mixing
- ✓ Aseptic protocols
- ✓ Aggressive conditions or chemicals
- ✓ Where non-leachable and non-reactive containers are required for packaging

Code	Capacity L (gal)	Description	Closure Size (mm)	Body Dia (mm)	LxB (mm)	Height with closure (mm)	No per Pk/Cs #
683210	5 (1.3)	Jerrican with Handle	53B	253	170	335	1/1
683220	10 (2.6)	Jerrican with Handle	53B	282	189	382	1/1
683230	20 (5.3)	Jerrican with Handle	53B	351	245	470	1/1
583252	10 (2.6)	Round Carboy with Handle-Amber HDPE	83B	249	x	390	1/1
583253	20 (5.3)	Round Carboy with Handle-Amber HDPE	83B	285	x	525	1/1
583321	10 (2.6)	Carboy NM, Round, Natural	83B	249	x	390	1/1
583322	20 (5.3)	Carboy NM, Round, Natural	83B	285	x	525	1/1
583323	50 (13.2)	Carboy NM, Round, Natural	83B	376	x	675	1/1
683241	5 (1.3)	Rectangular Carboy with stopcock	100-415	229	144	340	1/1
683242	10 (2.6)	Rectangular Carboy with stopcock	100-415	284	176	400	1/1
683243	20 (5.3)	Rectangular Carboy with stopcock	100-415	340	209	500	1/1
582272	20 (5.3)	Round Carboy with Handle HDPE Sterile	83B	285	x	525	1/1
582273	50 (13.2)	Round Carboy with Handle HDPE Sterile	83B	376	x	675	1/1
583378	33 (8.7)	Round Carboy with Handle HDPE Sterile	83B	377	x	550	1/1
583252S	10 (2.6)	Round Carboy with Handle-Amber HDPE Sterile	83B	249	x	390	1/1
583253S	20 (5.3)	Round Carboy with Handle-Amber HDPE Sterile	83B	285	x	525	1/1

#Pack size may vary for export customers.

Note: 83B and 53B Closures come with TPE gasket. Sterile Carboys & Jerricans are also available.



## Low Density Polyethylene Carboy

- Leakproof PP screw caps for guaranteed performance
- Round for homogenous stirring
- Convenient shoulder handles for easy carrying and pouring
- Graduations for volume determination at a glance
- Wide-mouth design for solids & powders

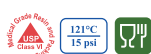
### Recommended applications-

- ✓ Where storage at low temperatures is required
- ✓ Stirring, storage and transport of intermediates and reagents

Code	Capacity L (gal)	Description	Closure Size (mm)	Body Dia (mm)	Height with closure (mm)	No per Pk/Cs
583371	10 (2.6)	Carboy with Handles	83B	249	385	1/1
584402	15 (3.9)	Carboy with Handles	83B	285	325	1/1
583372	20 (5.3)	Carboy with Handles	83B	285	525	1/1
584403	25 (6.6)	Carboy with Handles	83B	285	592	1/1
583373	50 (13.2)	Carboy with Handles	83B	376	675	1/1
583471	10 (2.6)	Wide-mouth Carboy with Handles	100-415	249	336	1/1
583472	20 (5.3)	Wide-mouth Carboy with Handles	100-415	285	478	1/1
584401	5 (1.3)	Carboy with Spigot	53B	180	365	1/1
584380	10 (2.6)	Carboy with Spigot	83B	249	385	1/1
584390	20 (5.3)	Carboy with Spigot	83B	285	525	1/1
584404	25 (6.6)	Carboy with Spigot	83B	285	592	1/1
584400	50 (13.2)	Carboy with Spigot	83B	376	675	1/1
586380	10 (2.6)	Carboy with Tubulation	83B	249	385	1/1
586390	20 (5.3)	Carboy with Tubulation	83B	285	525	1/1
583374	10 (2.6)	<b>Sterile</b> Carboy with handles	83B	249	385	1/1
583375	20 (5.3)	<b>Sterile</b> Carboy with handles	83B	285	525	1/1
583376	25 (6.6)	<b>Sterile</b> Carboy with handles	83B	285	592	1/1

# Carboy LDPE

A premium choice for daily use



## Carboy with Sanitary Flange/Neck

- Graduated and autoclavable
- Wide shoulder handles for easy carrying and pouring even with gloved hands.
- Ideal for aseptic transfer of solutions through a 3" tri-cover flange neck, in Sanitary Neck Carboys
- 1.5" Sanitary flange acts as dispensing port in the Sanitary flange Carboys
- Sanitary flange Carboys are used as supply reservoirs to systems such as chromatography columns or fermenters

Code	Capacity L (gal)	Description	Closure Size (mm)	Body Dia (mm)	Height with closure (mm)	No per Pk/Cs
584301	10 (2.6)	Carboy with Sanitary neck – PP	NA	249	376	1/1
584302	20 (5.3)	Carboy with Sanitary neck – PP	NA	285	518	1/1
584303	50 (10.0)	Carboy with Sanitary neck – PP	NA	376	665	1/1
584305	10 (2.6)	Carboy with Sanitary flange – PP	83B	295 (w/flange)	392	1/1
584307	20 (5.3)	Carboy with Sanitary flange – PP	83B	330 (w/flange)	525	1/1
584306	50 (10.0)	Carboy with Sanitary flange – PP	83B	423 (w/flange)	678	1/1

#Pack size may vary for export customers.

Note: 83B and 53B Closures come with TPE gasket. Sterile Carboys are also available.

# Sanitary Carboy PP

Ideal for aseptic sampling

# Carboy PC

A safer alternative  
to crystal clear glass



Polycarbonate Round Clear Carboy, with PP closure, TPE gasket

- Transparent and durable
- Leakproof and Autoclavable
- Round for homogeneous stirring
- Ideal for preparing media and safe storage and transporting of vaccines, biopharmaceuticals and other biotech materials in Life science industries
- Withstands -130°C to 135°C
- Moulded in graduations with 1000 mL / 0.25-gallon increments in 10L and 20L with  $\pm 2\%$  accuracy
- **Sterile** Double wrapped packaging available

**Recommended applications-**

- ✓ Where full content visualization is required
- ✓ For any protocol using glass where a safer alternative is required



Code	Capacity L (gal)	Description	Closure Size (mm)	Body Dia (mm)	Height with closure (mm)	No per Pk/Cs
583282	10 (2.6)	Round Clear Carboy, PC with PP closure	83B	251	397	1/1
583292	20 (5.3)	Round Clear Carboy, PC with PP closure	83B	285	528	1/1
583283	10 (2.6)	<b>Sterile</b> Double wrapped Carboy, PC with Gamma Indicator	83B	251	397	1/1
523293	20 (5.3)	<b>Sterile</b> Double wrapped Carboy, PC with Gamma Indicator	83B	285	528	1/1

#Pack size may vary for export customers.

Note: 83B and 53B Closures come with TPE gasket. Sterile Carboys are also available.



# Accessories

## Spare Closures & Gaskets for Narrow Mouth Carboy

Code	Description	No per Pk/Cs
53B-CAP	53B Replacement Closure	12 / 12
83B-CAP	83B Replacement Closure	6 / 6
53B-GSK	TPE Gasket for 53B Closure	12 / 12
83B-GSK	TPE Gasket for 83B Closure	12 / 12

## 3 Port Filling/Venting Closure, white PP, TPE gasket with platinum-cured silicone tubing

Material conforming to USP Class VI, non-cytotoxic, autoclavable, and is ideal for aseptic transfer of media, biological reagents, pure water, and chemicals to and from heavy duty vacuum bottles and carboys that accepts 53-B or 83-B closures. Includes 2 pieces of tubing.

Code	Size (mm)	Tubing ID	Packing
583216	53B	1/4" / 6.35 mm	2
583217	83B	1/4" / 6.35 mm	2
583218	83B	1/2" / 12.7 mm	2



## Quick fit filling/venting 83B closure, white PP with TPE gasket

Material conforming to USP Class VI, non-cytotoxic, non-autoclavable, and is ideal for aseptic transfer of media from bottles and carboys with an 83B neck finish. Quick disconnect tubing ports make installation a snap.

Code	No of ports	Tubing ID	Packing
583222	2	1/4" / 6.35 mm	1
583223	2	3/8" / 9.5 mm	1
583224	3	1/4" / 6.35 mm	1
583225	3	3/8" / 9.5 mm	1

## Spare Quick Disconnect Fittings

Replacement hose barb inserts for quick fit filling/venting 83B closure. Straight hose barb/Elbow hose barb (90°)

Code	Type	Tubing ID	Packing
583226	Straight	1/4" / 6.35 mm	1
583227	Straight	3/8" / 9.5 mm	1
583228	Elbow	1/4" / 6.35 mm	1
583229	Elbow	3/8" / 9.5 mm	1



# Accessories



## Spare Stopcock, PP

Material conforming to USP Class VI, Leakproof. Spigot is autoclavable in open condition

Code	Description	No per Pk/Cs
583211	Spare stopcock	1/5

## Safety Vent Cap for Narrow Mouth Carboy

Closure has additional 4 ports for 1/8" OD tubing and another 3 ports for 1/4" OD tubing.

Code	Description	No per Pk/Cs
583221	Safety vent cap	1/6

Note: 583221 is compatible with our Safety Vent Carboy (Code: 583281 & 583291)

## Autoclavable Septum Closure,PP

with PTFE/Silicone septum

Material conforming to USP Class VI, non-cytotoxic and is ideal for aseptic injection of reagent or sample withdrawal without compromising sterility or integrity of contents.

Code	Size (mm)	Packing
581718	24-415	12/96
581719	38-430	12/48



## Spare Tamper evident closure

Tamper evident closures are sterile, bulk packed, and are specially designed for use with PET/PETG/PC square media bottles. Featuring a tamper evident break ring design which combines the unique leakproof nature of our bottles/closure system with the possibility to ensure proof of content integrity.

Incorrect usage or deliberate opening of the media bottle can be readily detected through the separation of the seal ring.

Simple application and breaking of the tamper-evident seal ring eliminates the necessity for shrink bands and offers a single, cost-effective solution, ensuring both tamper evidence and leakproof assurance.

Code	Description	Closure Size (mm)	QTY / Pack	QTY / Case
TE20415-ST	HDPE Tamper evident Natural Cap Sterile	20-415	280	280
TE24415-ST	HDPE Tamper evident Natural Cap Sterile	24-415	200	200
TE38430-ST	HDPE Tamper evident Natural Cap Sterile	38-430	96	96

# Quality Control

At Tarsons, we pride ourselves on delivering plastic labware products of unparalleled quality, meticulously crafted to meet the rigorous standards of the Life Science industry. Our commitment to excellence is reflected in our robust Quality Control processes, comprehensive testing procedures, and rigorous inspection protocols.

## Resin Inspection

The process begins with the Selection of appropriate resins. Then, a thorough evaluation of raw materials is conducted.

The physical and chemical parameters for our raw materials are checked with the Batch Quality certificates received from our trusted suppliers, to check if the regulatory parameters are in line with the requirements.

Finally, we conduct Visual inspection studies to check for dust, moisture content, colour variations/patches, aesthetic appearance, etc.

## Moulding Inspection

The moulding inspection process begins with a thorough evaluation of the tooling used in the manufacturing process to ensure the moulds are free from defects. Following moulding process, the semi-finished products undergo a series of rigorous quality inspections and testing procedures before being approved for commercial release. The semi-finished products are inspected and tested as a running process at a regular interval of four hours. The quality inspections and testing procedures include visual inspection, weight checking, critical dimensions measurements and few usage relevant performance testing like - leak test, autoclaving test (for PP and PC container), pouch sealing test, sterility testing for sterile products, pyrogen testing for pyrogen free certified products etc. The finished products undergo another round of inspections including visual checks, label and batch verification, cartons inspections etc. all overseen by the QA team prior to transfer to store or commercial release.

## Leak Testing Procedures

Our rigorous quality inspection process includes routine leakage testing of both Bottles and Closures to provide a leakproof guarantee.

We conduct the following leakage tests to ensure that our products are leakproof-

### Leakage test by Vacuum method

Bottles & Carboys below 1000 mL capacity are filled with water up to 80% of its brim volume and secured tightly with closure by applying required torque. Then, the bottles are kept in inverted condition within a vacuum desiccator at -635 mm Hg pressure for 5 mins.

### Leakage test by Gravity method

Bottles & Carboys above 1000 ml capacity are filled with water up to 80% of its brim volume and secured tightly with closure by applying required torque. The bottles are kept horizontally and leave for 24 hrs in lying condition. If no leakage is observed, the containers are certified as Leakproof.

If any Tarsons container fails to meet our leakproof standards, simply return it to us for a guaranteed replacement.

# Quality Control

## Autoclaving Instructions:

Tarsons recommends an autoclaving cycle at 121°C, 15 psi for 20 minutes for its Polypropylene (PP), Polycarbonate (PC) and Polymethyl pentene (PMP) Labwares.

### POINTS TO REMEMBER WHILE AUTOCLAVING:

- ✔ Before autoclaving, set the closure on top of the container without engaging the threads. During decompression phase of the autoclaving cycle, the pressure within the vessel must be allowed to equalize. Any material stacked or placed over the closure has a potential to cause a vacuum to form, resulting in collapse.  
Following autoclaving, wait until the closure and carboy are completely cooled down to room temperature before securing closure.
- ✔ **DO NOT** autoclave any container with the closure in tight condition.
- ✔ **DO NOT** stack the bottles, jars and carboys.
- ✔ **DO NOT** place the product in an autoclaving basket with other objects placed on top.
- ✔ **DO NOT** place aluminium foil, gauze, cotton, tape or sterile wraps over the opening.
- ✔ **DO NOT** use PC vessels for vacuum application during autoclaving since sterilizing reduces mechanical strength.
- ✔ Polycarbonate (PC) vessels must be thoroughly rinsed before autoclaving because detergent residues cause crazing and spotting.
- ✔ While autoclaving PC vessels, the cycle should be limited to 20 minutes at 121°C, since PC shows loss of mechanical strength after repeated autoclaving.

Materials of construction (MOC)	No of Autoclaving cycles recommended
PP / PPCO / PC	20*

\*Note: Using water as sample; and in washing step, without using any base/alkali

**Important:** These guidelines are for empty containers only. Tarsons does not provide any validation/autoclaving manual/instructions/information on autoclaving with liquid inside any of our products. The consumers must perform all validation work regarding the procedure

# Regulatory Support

At Tarsons, we understand that regulatory compliance and exceptional customer support are paramount in the Life Science industry. With a steadfast commitment to quality and safety, we go above and beyond to meet and exceed regulatory standards while providing unparalleled support to our valued customers.

We aim to do this by providing-

- Product and Resin Validation documentation support
- Lot Specific Certificates of Quality (COQ)
- Change Notification Support
- Customer Onsite Audits
- QMS Certifications (ISO 9001 & 13485)

## Product and Resin validation support

Most of our products are made from high-quality medical grade DMF-listed resins which are selected to minimize additives & reduce potential leachables. Our products meet important regulatory specifications such as USP Class VI, RoHS, REACH Compliance, 21 CFR pt 177, EU 2011/10, EC 1935/2004, EC 2023/2006. Tarsons resins are free from BPAs, Phthalates, Latex, Residual Solvents, BSE-TSE, Food allergens, Extractables-Leachables, and Elemental impurities.

## Certificate of Quality (COQ)

Lot specific product certificates are available on request. By entering the product code and lot number information, the certificates can also be downloaded from our website.

## Change Notification Support

Following ISO and GMP standards, changes to manufacturing sites, packaging, and product specifications necessitate adherence to precise documented protocols for approval and execution. Every change is meticulously documented and can be traced back for accountability. Change Notifications are shared with registered customers for a specific list of products.

## Customer Support

Customers can access a Validation binder with compliance data and product specifications, once a confidentiality agreement is signed. For more details, you may reach out to our Quality Assurance team at [qa@tarsons.in](mailto:qa@tarsons.in)

Registered Customers may also receive electronic notifications of any specified form of major product changes, for a specific list of products. To receive such notifications, please register at [tarsons.com/resources/changenotificationsregistration](https://tarsons.com/resources/changenotificationsregistration)

We are dedicated to provide exceptional customer support by listening to your feedback and continuously striving to improve our products and services based on your needs.

You may reach out to us at: [customercare@tarsons.com](mailto:customercare@tarsons.com) / [enquiry@tarsons.com](mailto:enquiry@tarsons.com) for any further queries.



# Forced Extraction Study Reports



## What we Do

Forced extraction studies serve as pivotal investigations within the realm of analytical chemistry and biopharmaceutical manufacturing, providing essential insights into the potential interactions between materials and the substances they come into contact with. These comprehensive analyses are meticulously designed to simulate extreme conditions, aiming to extract and identify any compounds that may leach or migrate from the tested materials. By meticulously examining these extracted compounds, we, at Tarsons gain invaluable data crucial for understanding the safety, compatibility, and regulatory compliance of our diverse products and materials.

Ensuring the qualification and validation of production, harvesting, and containment materials is crucial in every biopharmaceutical manufacturing process. Global regulatory standards advise evaluating production, storage, and packaging components for extractables or leachables that may interact with or impact the product being manufactured.

In this report, we delve into the findings of forced extraction studies conducted on our Bottles & Carboys, shedding light on how each of the extracted compounds were analysed. Through these studies, we aim to offer valuable guidance to industries seeking to ensure the integrity and safety of their products. These studies are tailored to help you select the appropriate container, illustrating the typical extractables and leachables that you might encounter when conducting your own studies for submission.

## How we Do It

Extraction studies were conducted on our selected representative from a family of Bottles & Carboys.

- Samples of bottles and carboys were subjected to extreme conditions, including appropriate temperatures, varying pH levels, and prolonged exposure times
- The following Extraction Solvents were used on each unit for the forced extraction process-
  - Water
  - Ethanol
  - Hexanes
  - 10% Nitric acid
- Next, each of the extracted compounds were analyzed by three of the following techniques-
  - GC/MS (Gas Chromatography/Mass Spectrometry) for volatile and Direct Injection GC/MS for semi-volatile organic compounds
  - LC/MS (Liquid Chromatography/Mass Spectrometry) for non-volatile organic compounds
  - ICP (Inductively Coupled Plasma) for elemental extractables & metals using an acid digested solution

Apart from Forced extraction studies, numerous other studies are conducted throughout our range of bottles and carboy systems, including Extractables and Leachables studies (E&L).

For further information regarding compliance needs, contact us at [info@tarsons.com](mailto:info@tarsons.com)

## Bottles & Carboys specifications

Nominal Capacity	Description	Catalog Number	Approx. Brim Cap.,ml	Material	Color	Screw Closure Size, mm	I.D. Neck, mm	O.D. Bottle, mm	Hgt. w/out Closure, mm
4 ml (1/8 oz.)	Bottle, NM, Round	582070	4.3	PP	Natural	13-415	8.3	15.8	38.6
		583170	4.3	HDPE	Natural	13-415	8.3	15.8	38.6
		581170	4.3	HDPE	Amber	13-415	8.3	15.8	38.6
5 ml (1/8 oz.)	Bottle, NM, Round	582071	6.1	PP	Natural	13-415	8.4	17.8	40.3
		583171	6.1	HDPE	Natural	13-415	8.2	17.8	39.8
		581172	6.1	HDPE	Amber	13-415	8.2	17.8	39.8
8 ml (1/4 oz.)	Bottle, NM, Round	582080	11.1	PP	Natural	20-415	13.4	25	42.3
		586080	11.1	LDPE	Natural	20-415	13.4	24.7	42.3
		583180	11.1	HDPE	Natural	20-415	13.2	25	42.3
		581180	11.1	HDPE	Amber	20-415	13.2	25	42.3
15 ml (1/2 oz.)	Bottle, NM, Round	582090	16.8	PP	Natural	20-415	13.5	25	56
		586090	16.8	LDPE	Natural	20-415	13.3	24.8	56
		583190	16.8	HDPE	Natural	20-415	13.2	24.7	55.5
		581190	16.8	HDPE	Amber	20-415	13.2	24.7	55.5
20 ml (1/2 oz.)	Bottle, NM, Round	582091	23.1	PP	Natural	20-415	13	27.1	58.5
		583191	23.1	HDPE	Natural	20-415	13	27.1	58.1
		581191	23.1	HDPE	Amber	20-415	13	27.1	58.1
30 ml (1 oz.)	Bottle, NM, Round	582100	35	PP	Natural	20-415	13.8	36.5	60
		586200	35	LDPE	Natural	20-415	13.8	36.4	60
		583100	35	HDPE	Natural	20-415	13.5	36.3	59.5
		581200	35	HDPE	Amber	20-415	13.5	36.3	59.5
	Bottle, WM, Round	582200	34.6	PP	Natural	28-415	21.4	34.8	59.8
		585200	34.6	LDPE	Natural	28-415	21.5	34.7	59.8
		584200	34.6	HDPE	Natural	28-415	21	34.6	59.1
581300	34.6	HDPE	Amber	28-415	21	34.6	59.1		
60 ml (2 oz.)	Bottle, NM, Round	582110	65	PP	Natural	20-415	13.8	40.2	82.6
		586210	65	LDPE	Natural	20-415	13.8	39.9	82
		583110	65	HDPE	Natural	20-415	13.5	39.8	82
		581210	65	HDPE	Amber	20-415	13.5	39.8	82
	Bottle, WM, Round	582210	67	PP	Natural	28-415	21.3	39.7	82.5
		585210	67	LDPE	Natural	28-415	21.3	39.5	82.4
		584210	67	HDPE	Natural	28-415	21.1	39.2	81.5
		581310	67	HDPE	Amber	28-415	21.1	39.2	81.5
	Bottle, WM, Square	582221	72	PP	Natural	28-415	21	35.4	81.8
584221		72	HDPE	Natural	28-415	20.8	35.5	80.9	
585221	72	HDPE	Amber	28-415	20.8	35.5	80.9		
125 ml (4 oz.)	Bottle, NM, Round	582120	138	PP	Natural	24-415	17.7	51.7	98.3
		586220	138	LDPE	Natural	24-415	17.7	51.5	98.4
		583120	138	HDPE	Natural	24-415	17.7	51	98.2
		581220	138	HDPE	Amber	24-415	17.7	51	98.2
	Bottle, WM, Round	582220	139	PP	Natural	38-415	28.6	50.6	95.5
		585220	139	LDPE	Natural	38-415	28.7	50.5	95.5
		584220	139	HDPE	Natural	38-415	28.3	50.3	94.7
		581320	139	HDPE	Amber	38-415	28.3	50.3	94.7
	Bottle, WM, Rect.	583320	139.6	HDPE	Natural	28-415	21.1	60 X 39.4	97.3
583420		139.6	HDPE	Amber	28-415	21.1	60 X 39.4	97.3	
175 ml (6 oz.)	Bottle, WM, Square	582222	182	PP	Natural	38-415	28.7	52.1	100.7
		584222	182	HDPE	Natural	38-415	28.5	51	100.5
		585222	182	HDPE	Amber	38-415	28.5	50.9	100.5
250 ml (8 oz.)	Bottle, NM, Round	582130	290	PP	Natural	24-415	17.7	61.5	131.7
		586230	290	LDPE	Natural	24-415	17.6	61.1	130.7
		583130	290	HDPE	Natural	24-415	17.5	60.8	130.9
		581230	290	HDPE	Amber	24-415	17.5	60.8	130.9
	Bottle, WM, Round	582230	295	PP	Natural	43-415	33	61.6	127.4
		585230	295	LDPE	Natural	43-415	33.1	61.2	127.7
		584230	295	HDPE	Natural	43-415	32.8	60.9	127
		581330	295	HDPE	Amber	43-415	32.8	60.9	127
	Bottle, WM, Rect.	583330	290	HDPE	Natural	38-415	28.8	75.5 X 54	112
		583430	290	HDPE	Amber	38-415	28.8	75.5 X 54	112
	Bottle, WM, Square	582223	291	PP	Natural	43-415	33	60.3	112.4
		584223	291	HDPE	Natural	43-415	32.7	60.3	111.6
585223	291	HDPE	Amber	43-415	32.7	60.3	111.6		















## Bottles & Carboys specifications

Nominal Capacity	Description	Catalog Number	Approx. Brim Cap.,ml	Material	Color	Screw Closure Size, mm	I.D. Neck, mm	O.D. Bottle, mm	Hgt. w/out Closure, mm	
500 ml (16 oz.)	Bottle, NM, Round	582140	540	PP	Natural	28-415	21.2	73.5	168	
		586240	540	LDPE	Natural	28-415	21.2	72.8	168	
		583140	540	HDPE	Natural	28-415	21.1	73	168	
		581240	540	HDPE	Amber	28-415	21.1	73	168	
	Bottle, WM, Round	582240	568	PP	Natural	53-415	43.8	73.1	164	
		585240	568	LDPE	Natural	53-415	43.9	72.8	164	
		584240	568	HDPE	Natural	53-415	44	72.7	164	
		581340	568	HDPE	Amber	53-415	44	72.7	164	
	Bottle, WM, Rect.	583340	645	HDPE	Natural	48-415	38	100X64.7	140.6	
		583440	645	HDPE	Amber	48-415	38	100X64.7	140.6	
	Bottle, WM, Square	582224	570	PP	Natural	53-415	43.8	75	141.1	
		584224	570	HDPE	Natural	53-415	43.7	72.7	141.5	
		585224	570	HDPE	Amber	53-415	43.7	72.7	141.5	
1 Litre (32 oz.)	Bottle, NM, Round	582150	1100	PP	Natural	38-430	27.8	93.9	214	
		586250	1100	LDPE	Natural	38-430	27.8	93.1	214	
		583150	1100	HDPE	Natural	38-430	27.8	93.1	214	
		581250	1100	HDPE	Amber	38-430	27.8	93.1	214	
	Bottle, WM, Round	582250	1120	PP	Natural	63-415	53.3	92.7	195	
		585250	1120	LDPE	Natural	63-415	52.2	92	195	
		584250	1120	HDPE	Natural	63-415	51.9	92	195	
		581350	1120	HDPE	Amber	63-415	51.9	92	195	
	Bottle, WM, Rect.	583350	1140	HDPE	Natural	53-415	43.7	125.2X70.2	175	
		583450	1140	HDPE	Amber	53-415	43.7	125.2X70.2	175	
	Bottle, WM, Square	582225	1150	PP	Natural	63-415	53.2	90.7	178	
		584225	1150	HDPE	Natural	63-415	52.9	90.5	177	
			585225	1150	HDPE	Amber	63-415	52.9	90.5	177
		Bottle, Heavy Duty, Round	582258	1050	PP	Natural	53B	38.9	92.9	217
2 Litre (1/2 gal.)	Bottle, NM, Round	582180	2082	PP	Natural	38-430	26.9	120	247	
		586260	2082	LDPE	Natural	38-430	26.9	119	246	
	Bottle, WM, Round	582260	2260	PP	Natural	100-415	90.5	119.5	236	
		585260	2260	LDPE	Natural	100-415	90.2	119.2	236	
		584260	2260	HDPE	Natural	100-415	89.5	119	236	
		581360	2260	HDPE	Amber	100-415	89.5	118.5	236	
	Bottle, WM, Rect. w/Handle	583360	2380	HDPE	Natural	63-415	52.3	150X97	240	
		583460	2380	HDPE	Amber	63-415	52.3	150X97	240	
	Bottle, Heavy Duty, Round	583255	2050	PP	Natural	53B	38.4	120	258	
4 Litre (1 gal.)	Bottle, NM, Round	582160	4360	PP	Natural	38-430	27	153	330	
		586280	4360	LDPE	Natural	38-430	27	153	408	
	Bottle, WM, Round	582270	4200	PP	Natural	100-415	86.7	152	280	
		584270	4200	HDPE	Natural	100-415	86.7	152	280	
		581370	4200	HDPE	Amber	100-415	86.7	152	280	
		585270	4200	LDPE	Natural	100-415	86.1	152	280	
		583257	4500	PP	Natural	100-415	86.7	163	293	
	Bottle, WM, Round w/Handle	583357	4500	HDPE	Natural	100-415	86.7	163	293	
		583258	4590	PP	Natural	100-415	86.1	147.2X147.2	293	
	Bottle, WM, Square w/Handle	583358	4590	HDPE	Natural	100-415	86.7	147.2X147.2	293	
582255		4100	PP	Natural	83B	65	154	336		
5 Litre (1 gal.)	Carboy Round w/Stopcock	583279	6200	PP	Natural	53B	38.9	181	352	
		584401	6200	LDPE	Natural	53B	38.8	180	350	
	Carboy Rect. w/Stopcock	683240	6690	PP	Natural	100-415	86.3	229X144	330	
		683241	6690	HDPE	Natural	100-415	86.3	229X144	330	
	Aspirator Bottle w/Stopcock Jerrican	583210	5400	PP	Natural	53	43.5	172	347	
	683210	8110	HDPE	Natural	53B	38.9	253X170	329		
8 Litre (2 gal.)	Bottle, NM, Round	582190	8500	PP	Natural	53B	39.1	195	408	
		586290	8500	LDPE	Natural	53B	39.1	195	408	
10 Litre (2 gal.)	Carboy, NM, Round	583250	11500	PP	Natural	83B	65	249	376	
		583321	11800	HDPE	Natural	83B	65	249	376	
		583252	11840	HDPE	Amber	83B	65	249	376	
		583371	11840	LDPE	Natural	83B	65	249	376	
		583374	11840	LDPE	Natural	83B	65	249	376	
	Carboy, WM, Round	583351	11600	PP	Natural	100-415	85.6	249	331	
		583471	11600	LDPE	Natural	100-415	85.6	249	331	
	Carboy, Round w/Stopcock	583280	11460	PP	Natural	83B	65	249	376	
		584380	11460	LDPE	Natural	83B	65	249	376	
	Carboy, Rect. w/Stopcock	683250	11800	PP	Natural	100-415	86.3	284X176	389	
683242		11800	HDPE	Natural	100-415	87.3	284X176	389		




## Bottles & Carboys specifications

Nominal Capacity	Description	Catalog Number	Approx. Brim Cap.,ml	Material	Color	Screw Closure Size, mm	I.D. Neck, mm	O.D. Bottle, mm	Hgt. w/out Closure, mm
10 Litre (2 gal.)	Aspirator Bottle w/Stopcock	583220	10500	PP	Natural	53	43.8	200	454
	Carboy w/3" Sanitary Neck	584301	11600	PP	Natural	NA	65	249	376
	Carboy w/1.5" Sanitary Flange	584305	11300	PP	Natural	83B	65	295(w/flange)	376
	Carboy, Heavy Duty, Round	583265	11200	PP	Natural	83B	65	249	376
	Jerrican	683220	11580	HDPE	Natural	53B	38.9	282X189	374
15 Litre (3 gal.)	Carboy, NM, Round	583251	17500	PP	Natural	83B	65	285	422
		584402	17500	LDPE	Natural	83B	65	285	415
	Carboy WM, Round	583272	17200	PP	Natural	100-415	85.6	285	375
20 Litre (4 gal.)	Carboy, NM, Round	583260	23370	PP	Natural	83B	65	285	518
		583372	23000	LDPE	Natural	83B	65	285	518
		583375	23000	LDPE	Natural	83B	65	285	518
		583322	23000	HDPE	Natural	83B	65	285	518
		583253	23000	HDPE	Amber	83B	65	285	518
	Carboy, WM, Round	583361	23000	PP	Natural	100-415	85.6	285	472
		583472	23000	LDPE	Natural	100-415	85.6	285	472
	Carboy, Round w/Stopcock	583290	23000	PP	Natural	83B	65	285	518
		584390	23250	LDPE	Natural	83B	65	285	518
	Carboy, Rect. w/Stopcock	683260	20560	PP	Natural	100-415	85.7	340X209	486
		683243	20560	HDPE	Natural	100-415	86.3	340X209	486
	Aspirator Bottle w/Stopcock	583230	22700	PP	Natural	53	43.5	262	536
	Carboy w/3" Sanitary Neck	584302	23000	PP	Natural	NA	65	285	518
	Carboy w/1.5" Sanitary Flange	584307	23000	PP	Natural	83B	65	330(w/flange)	518
	Carboy, Heavy Duty, Round	583266	22000	PP	Natural	83B	65	285	518
Jerrican	683230	24190	HDPE	Natural	53B	38.9	351X245	463	
25 Litre (5 gal.)	Carboy, NM, Round	583261	27300	PP	Natural	83B	65.5	285	587
		584403	27300	LDPE	Natural	83B	65.5	285	583
	Carboy, Round w/Stopcock	583263	27300	PP	Natural	83B	65.5	285	587
		584404	27300	LDPE	Natural	83B	65.5	285	583
33 Litre(6 gal.)	Carboy, NM, Round	583264	41000	PP	Natural	83B	66.3	377	531
50 Litre (10 gal.)	Carboy, NM, Round	583270	54120	PP	Natural	83B	65	376	665
		583373	54120	LDPE	Natural	83B	65	376	665
		583323	53000	HDPE	Natural	83B	66	376	665
	Carboy, Round w/Stopcock	583300	54360	PP	Natural	83B	65	376	665
		584400	54360	LDPE	Natural	83B	65	376	665
	Carboy w/ 3" Sanitary Neck	584303	53000	PP	Natural	NA	65	376	665
	Carboy w/1.5" Sanitary Flange	584306	54000	PP	Natural	83B	65	423(w/flange)	665

## Resin Quick Reference Chart

	Polypropylene (PP)	Polypropylene Copolymer (PPCO)	Low Density Polypropylene (LDPE)	High Density Polypropylene (HDPE)
Max Use Temperature 	135°C 	121°C 	80°C 	120°C 
Brittleness Temperature 	0°C 	-40°C 	-100°C 	-100°C 
Autoclavable	Y	Y	N	N
Microwavable	Y	Marginal	Y	N
Dry Heat (Oven)	N	N	N	N
Freeze	N	Y	Y	Y
Flexibility	Rigid	Moderate	Excellent	Rigid
Clarity	Translucent	Translucent	Translucent	Translucent
Recycling Symbol				

## Autoclaving Conditions

	121°C
	20 min
	15 psi PSI

### CAUTION

Before autoclaving set the closure on top of the container without engaging the threads. During decompression phase of the autoclaving cycle, the pressure within the vessel must be allowed to equalize. Any material stacked or placed over the closure has a potential to cause a vacuum to form, resulting in collapse.

## Physical Properties of Tarsons Labware

Resin	Max Use Temp °C	Brittleness Temp °C	Transparency	Sterilization					Specific Gravity	Flexibility	Water Adsorption %
				Auto-claving	Gas	Dry Heat	Radiation	Disinfectant			
HDPE	120	-100	Translucent	No	Yes	No	Yes	Yes	0.95	Rigid	<0.01
LDPE	80	-100	Translucent	No	Yes	No	Yes	Yes	0.92	Excellent	<0.01
PC	135	-135	Clear	Yes +	Yes	No	Yes	Yes	1.20	Rigid	0.35
PMMA	50	20	Clear	No	No	No	Yes	Some	1.20	Rigid	0.30
PP	135	0	Translucent	Yes	Yes	No	No	Yes	0.90	Rigid	<0.02
PS	90	20	Clear	No	Yes	No	Yes	Some	1.05	Rigid	0.05
PSF	165	-100	Clear	Yes	Yes	Yes +	Yes	Yes	1.24	Rigid	0.30
PTFE	260	-100	Opaque	Yes	Yes	Yes	No	Yes	2.17	Rigid	<0.01
PVDF	150	-62	Translucent	Yes	Yes	No	No	Yes	1.75	Rigid	0.05
TPX	145	20	Clear	Yes	Yes	Yes +	No	Yes	0.83	Rigid	<0.01
PET	65	-40	Clear	No	Yes	No	Yes	Some	1.37	Moderate	0.25
PETG	70	-40	Clear	No	Yes	No	Yes	Some	1.27	Moderate	0.13

### Sterilization

- Autoclaving (121°C, 15 psig for 20 minutes) Clean and rinse item with distilled water before autoclaving. Certain Chemicals which have no appreciable effect on resins at room temperature may cause deterioration at autoclaving temperatures.  
**ALWAYS COMPLETELY DISENGAGE THREADS BEFORE AUTOCLAVING.**
  - Gas - Ethylene oxide, formaldehyde.
  - Dry heat - 160°C for 120 minutes
  - Disinfectant - Benzalkonium chloride, Formalin, Ethanol, etc.
  - Radiation - gamma irradiated at 2.5 MRad with unstabilized plastic.
- + Sterilizing reduces mechanical strength. Do not use PC vessels for vacuum application if they have been autoclaved.

## Chemical Resistance for Tarsons Labware

Classes of Substances at Room Temperature	HDPE	LDPE	PC	PMMA	PP	PS	PSF	PTFE	PVDF	TPX/PMP	PET	PETG
Acids, dilute or weak	E	E	E	G	E	E	E	E	E	E	E	G
Acids, strong and concentrated	G	G	N	N	G	F	G	E	E	E	F	N
Alcohols, aliphatic	E	E	G	N	E	G	G	E	E	E	E	G
Aldehydes	G	G	F	F	G	F	F	E	G	G	G	G
Bases	E	E	N	F	E	E	E	E	G	E	F	N
Esters	G	G	N	N	G	N	N	E	G	E	G	F
Hydrocarbons, Aliphatic	G	F	G	G	G	F	G	E	E	G	E	G
Hydrocarbons, Aromatic	N	N	N	N	N	N	N	E	E	N	G	N
Hydrocarbons, Halogenated	N	N	N	N	N	N	N	E	F	N	G	N
Ketones, aromatic	N	N	N	N	N	N	N	E	F	F	G	N
Oxidizing agents, strong	F	F	F	N	F	G	G	E	G	G	F	F

### Chemical Resistance Classification

- E** = Excellent- 30 days of constant exposure causes no damage. Plastics may even tolerate for years.  
**G** = Good- Little or no damage after 30 days of constant exposure to the reagent.  
**F** = Fair- Some effect seen after 7 days of constant exposure to the reagent. Depending on the plastic, the effect may be crazing, cracking, loss of strength or discoloration. Solvents may cause softening, swelling and permeation losses with LDPE, HDPE, PP, PCO and PMP. The solvent effects on these five resins are normally reversible; the part will usually return to its normal condition after evaporation.  
**N** = Not recommended for continuous use. Immediate damage may occur. Depending on the plastic, the effect will be a more severe crazing, cracking, loss of strength, discoloration, deformation, dissolution or permeation loss.

## Resin Code

<b>HDPE</b>	High-density polyethylene
<b>LDPE</b>	Low-density polyethylene
<b>PC</b>	Polycarbonate
<b>PMMA</b>	Polymethyl methacrylate
<b>PP</b>	Polypropylene
<b>PS</b>	Polystyrene
<b>PSF</b>	Polysulfone
<b>PTFE</b>	Polytetrafluoroethylene
<b>PVDF</b>	Polyvinylidene fluoride
<b>TPX/PMP</b>	Polymethylpentene
<b>PET</b>	Polyethylene terephthalate
<b>PETG</b>	Polyethylene terephthalate glycol

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