Tarsons
TRUST DELIVERED

Bottles & Carboys

you can trust...

DNV·GL

MANAGEMENT SYSTEM CERTIFICATE

Certificate No: 184381-2015-AQ-IND-RvA

Initial certification date: 10, September, 2009

Valid: 10, September, 2018 - 09, September, 2021

This is to certify that the management system of

Tarsons Products Pvt. Ltd.
Jasmine Tower, 31, Shakespeare Sarani, Kolkata - 700 017, West Bengal, India
and the sites as mentioned in the appendix accompanying this certificate

has been found to conform to the Quality Management System standard:
ISO 9001:2015

This certificate is valid for the following scope:
Manufacture and distribution of plastic labware

Place and date:
Chennai, 24, August, 2018

For the issuing office:
DNV GL – Business Assurance
ROMA, No. 10, GST Road, Alandur,
Chennai - 600 016, India

Sivadasan Madiyath
Management Representative

The RvA is a signatory to the IAF MLA

Lack of fulfilment of conditions as set out in the Certification Agreement may render this Certificate invalid.
ACCREDITED UNIT: DNV GL Business Assurance B.V., ZWOLSEWEG 1, 2994 LB, BARENDRECHT, NETHERLANDS. TEL:+31102922689.
assurance.dnvgl.com

Presafe
A DNV GL & NEMKO COMPANY

Management System Certificate

Certificate No.:
25978B-2018-AQ-IND-NA-PS Rev. 0.0

Project No.:
PRJC-352357-2011-MSC-IND

Initial Certification Date:
12 April 2018

Valid Until:
23 February 2021

This is to certify that the management system of:

Tarsons Products Pvt.Ltd.
Jasmine Towers, Suite Number 213 - 214, 31 Shakespeare Sarani, Kolkata - 700 017, INDIA

With sites as listed overleaf.

Complies with the requirements of:

ISO 13485:2016/NS-EN ISO 13485:2016

The Certificate is valid for the following scope:

Development, Manufacturing, Marketing and Supply of Sterile and Non-Sterile Plastic Labwares for Clinical and Medical use.

Place and Date:
Høvik, 12 April 2018

NORWEGIAN ACCREDITATION
MSYS 018

For:
DNV GL NEMKO PRESAFE AS

Eugenie Winger Husebye

The Certificate has been digitally signed.
See www.presafe.com/digital_signatures for more info

MSD-CO-078

Notice: The Certificate is subject to terms and conditions as set out in the Certification Agreement. Failure to comply may render this Certificate invalid.
DNV GL NEMKO PRESAFE AS - Veritasveien 3, N-1363 Høvik, Norway - Registered Enterprise No: NO 997 087 401 MVA

Page 1 of 2

Tarsons
Bottles and Carboys

CONTENTS

Trust our Bottles & Carboys

with your precious samples

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

Tarsons range of Bottles & Carboys are made with the purest grade of resins, making us #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.

CERTIFIED ISO 9001:2015 CERTIFIED

10 Top reasons why Tarsons is reliable

1. Wide range of products to select from
2. Matches Regulatory Standards
3. Meets ISO 13485:2016 & ISO 9001:2015
4. Versatile use - both laboratories & production
5. High quality resins
6. Shatterproof construction
7. Leakproof Guarantee
8. Economical choice
9. No leachability
10. Technical Assistance provided

The Tarsons Factor

Leakproof Guarantee

Tarsons bottles and closures are designed with a strong and semi-buttress thread design. We offer a leakproof guarantee as we manufacture and test both components routinely as part of our quality inspection process. Tarsons closures come with no liner that wears or corrodes, or causes contamination.

High Quality Resin

The Tarsons range of bottles & carboys are made from the highest quality resin that meet medical grade standards. Our resins are selected to minimize additives and reduce potential leachables.
We don't use plasticizers or fillers, thus creating a safe storage space for your valuable samples.

Shatter-proof Safe

Plastics contain lower concentrations of trace elements extractables than glass and are less likely to break. Tarsons containers amplify this advantage, creating rugged containers that assure you the protection you expect for your valuable work.

Tarsons

Bottles and Carboys

Wide range Selection

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

Quality Reassured

Tarsons Bottles & Carboys are manufactured in registered ISO manufacturing facilities. We use injection blow-molding process in the manufacture of many of our products that results in more uniform wall thickness and durability. Leakproof-testing is also performed in each and every manufacturing lot.

Standards compliant

Our resins are USP Class VI certified, and are highly resistant. Tarsons containers are reusable and durable, making us a popular choice amongst global customers.

Round Bottle & Carboys

Nominal Capacity	Description	Catalog Number	Approx. Brim Capacity ml	Material	Colour	Screw Closure	I.D. Neck mm	O.D. Bottle mm	Approx. Hgt without Closure mm
4 ml	Bottle NM	582070	4.3	PP	Natural	13	8.3	15.8	38.6
	Bottle NM	583170	4.3	HDPE	Natural	13	8.3	15.8	38.6
	Bottle NM	581170	4.3	HDPE	Amber	13	8.3	15.8	38.6
8 ml	Bottle NM	582080	11.1	PP	Natural	20	13.4	25	42.3
	Bottle NM	586080	11.1	LDPE	Natural	20	13.4	24.7	42.3
	Bottle NM	583180	11.1	HDPE	Natural	20	13.2	25	42.3
	Bottle NM	581180	11.1	HDPE	Amber	20	13.2	25	42.3
15 ml	Bottle NM	582090	16.8	PP	Natural	20	13.5	25	56
	Bottle NM	586090	16.8	LDPE	Natural	20	13.3	24.8	56
	Bottle NM	583190	16.8	HDPE	Natural	20	13.2	24.7	55.5
	Bottle NM	581190	16.8	HDPE	Amber	20	13.2	24.7	55.5
30 ml	Bottle NM	582100	35	PP	Natural	20	13.8	36.5	60
	Bottle NM	586200	35	LDPE	Natural	20	13.8	36.4	60
	Bottle NM	583100	35	HDPE	Natural	20	13.5	36.3	59.5
	Bottle NM	581200	35	HDPE	Amber	20	13.5	36.3	59.5
	Bottle WM	582200	34.6	PP	Natural	28	21.4	34.8	59.8
	Bottle WM	585200	34.6	LDPE	Natural	28	21.5	34.7	59.8
	Bottle WM	584200	34.6	HDPE	Natural	28	21	34.6	59.1
	Bottle WM	581300	34.6	HDPE	Amber	28	21	34.6	59.1
60 ml	Bottle NM	582110	65	PP	Natural	20	13.8	40.2	82.6
	Bottle NM	586210	65	LDPE	Natural	20	13.8	39.9	82
	Bottle NM	583110	65	HDPE	Natural	20	13.5	39.8	82
	Bottle NM	581210	65	HDPE	Amber	20	13.5	39.8	82
	Bottle WM	582210	67	PP	Natural	28	21.3	39.7	82.5
	Bottle WM	585210	67	LDPE	Natural	28	21.3	39.5	82.4
	Bottle WM	584210	67	HDPE	Natural	28	21.1	39.2	81.5
	Bottle WM	581310	67	HDPE	Amber	28	21.1	39.2	81.5
125 ml	Bottle NM	582120	138	PP	Natural	24	17.7	51.7	98.3
	Bottle NM	586220	138	LDPE	Natural	24	17.7	51.5	98.4
	Bottle NM	583120	138	HDPE	Natural	24	17.7	51	98.2
	Bottle NM	581220	138	HDPE	Amber	24	17.7	51	98.2
	Bottle WM	582220	139	PP	Natural	38	28.6	50.6	95.5
	Bottle WM	585220	139	LDPE	Natural	38	28.7	50.5	95.5
	Bottle WM	584220	139	HDPE	Natural	38	28.3	50.3	94.7
	Bottle WM	581320	139	HDPE	Amber	38	28.3	50.3	94.7
250 ml	Bottle NM	582130	290	PP	Natural	24	17.7	61.5	131.7
	Bottle NM	586230	290	LDPE	Natural	24	17.6	61.1	130.7
	Bottle NM	583130	290	HDPE	Natural	24	17.5	60.8	130.9
	Bottle NM	581230	290	HDPE	Amber	24	17.5	60.8	130.9
	Bottle WM	582230	295	PP	Natural	43	33	61.6	127.4
	Bottle WM	585230	295	LDPE	Natural	43	33.1	61.2	127.7
	Bottle WM	584230	295	HDPE	Natural	43	32.8	60.9	127
	Bottle WM	581330	295	HDPE	Amber	43	32.8	60.9	127

Nominal Capacity	Description	Catalog Number	Approx. Brim Capacity ml	Material	Colour	Screw Closure	I.D. Neck mm	O.D. Bottle mm	Approx. Hgt without Closure mm
500 ml	Bottle NM	582140	540	PP	Natural	28	21.2	73.5	168
	Bottle NM	586240	540	LDPE	Natural	28	21.2	72.8	168
	Bottle NM	583140	540	HDPE	Natural	28	21.1	73	168
	Bottle NM	581240	540	HDPE	Amber	28	21.1	73	168
	Bottle NM	582141	577	PP	Natural	38	28.2	75.2	180
	Bottle WM	582240	585	PP	Natural	53	43.8	73.1	164
	Bottle WM	585240	568	LDPE	Natural	53	43.9	72.8	164
	Bottle WM	584240	568	HDPE	Natural	53	44	72.7	164
	Bottle WM	581340	568	HDPE	Amber	53	44	72.7	164
1 litre	Bottle NM	582150	1100	PP	Natural	38	27.8	93.9	214
	Bottle NM	586250	1100	LDPE	Natural	38	27.8	93.1	214
	Bottle NM	583150	1100	HDPE	Natural	38	27.8	93.1	214
	Bottle NM	581250	1100	HDPE	Amber	38	27.8	93.1	214
	Bottle WM	582250	1120	PP	Natural	63	53.3	92.7	195
	Bottle WM	585250	1120	LDPE	Natural	63	52.2	92	195
	Bottle WM	584250	1120	HDPE	Natural	63	51.9	92	195
	Bottle WM	581350	1120	HDPE	Amber	63	51.9	92	195
2 litres	Bottle NM	582180	2082	PP	Natural	38	26.9	120	247
	Bottle NM	586260	2082	LDPE	Natural	38	26.9	119	246
	Bottle WM	582260	2260	PP	Natural	100	90.5	119.5	236
	Bottle NM	585260	2260	LDPE	Natural	100	90.2	119.2	236
	Bottle WM	584260	2260	HDPE	Natural	100	90.8	119	236
	Bottle WM	581360	2260	HDPE	Amber	100	90.8	199	236
	Heavy Duty Vacuum Bottle	583225	2250	PP	Natural	53	38.4	118.75	258
4 litres	Bottle NM	582160	4360	PP	Natural	38	27	153	330
	Bottle NM	582170	4360	PP	Amber	38	27	153	330
	Bottle NM	586280	4360	LDPE	Natural	38	27	153	408
	Bottle WM with handle	583257	4500	PP	Natural	100	86.7	163	293
	Bottle NM with handle	583357	4500	HDPE	Natural	100	86.7	163	293
	Heavy Duty Vacuum Bottle	582255	4100	PP	Natural	83	65	154	336
5 litres	Aspirator Bottle w/Stopcock	583210	5400	PP	Natural	53	43.8	168	345
8 litres	Bottle NM	582190	8500	PP	Natural	53	39.1	195	408
	Bottle NM	586290	8500	LDPE	Natural	53	39.1	195	408
10 litres	Carboy NM	583250	11500	PP	Natural	83	65	249	376
	Carboy NM	583252	11840	HDPE	Amber	83	65	249	376
	Carboy NM	583371	11840	LDPE	Natural	83	65	249	376
	Carboy Wide Mouth	583351	11600	PP	Natural	100	85.6	249	331
	Carboy Wide Mouth	583471	11600	LDPE	Natural	100	85.6	249	331
	Carboy with Stopcock	583280	11460	PP	Natural	83	65	249	376
	Carboy with Stopcock	584380	11460	LDPE	Natural	83	65	249	376
	Carboy with Tubulation	585380	11460	PP	Natural	83	65	249	376
	Carboy with Tubulation	586380	11460	LDPE	Natural	83	65	249	376
	Aspirator Bottle w/Stopcock	583220	10500	PP	Natural	53	43.5	200	453
20 litres	Carboy NM	583260	22000	PP	Natural	83	65	285	518
	Carboy NM	583372	22000	LDPE	Natural	83	65	285	518
	Carboy Wide Mouth	583361	22000	PP	Natural	100	85.6	285	472
	Carboy Wide Mouth	583472	22000	LDPE	Natural	100	85.6	285	472
	Carboy with Stopcock	583290	21500	PP	Natural	83	65	285	518
	Carboy with Stopcock	584390	21500	LDPE	Natural	83	65	285	518
	Carboy with Tubulation	585390	21500	PP	Natural	83	65	285	518
	Carboy with Tubulation	586390	21500	LDPE	Natural	83	65	285	518
	Aspirator Bottle w/Stopcock	583230	22700	PP	Natural	53	43.8	265	533
50 litres	Carboy NM	583270	54120	PP	Natural	83	65	376	665
	Carboy NM	583373	54120	LDPE	Natural	83	65	376	665
	Carboy with Stopcock	583300	54360	PP	Natural	83	65	376	665
	Carboy with Stopcock	584400	54360	LDPE	Natural	83	65	376	665

Square Bottle & Carboys

Nominal Capacity	Description	Catalog Number	Approx. Brim Capacity ml	Material	Colour	Screw Closure mm	Approx. I.D. Neck mm	Approx. Bottle O.D. (L X W) mm	Approx. Hgt without Closure mm
125 ml	Rectangular Bottle	583320	139.6	HDPE	Natural	28	21.1	60 X 39.4	97.3
	Rectangular Bottle	583420	139.6	HDPE	Amber	28	21.1	60 X 39.4	97.3
250 ml	Rectangular Bottle	583330	290	HDPE	Natural	38	28.8	75.5 X 54	112
	Rectangular Bottle	583430	290	HDPE	Amber	38	28.8	75.5 X 54	112
500 ml	Rectangular Bottle	583340	645	HDPE	Natural	48	38	100 X 64.7	140.6
	Rectangular Bottle	583440	645	HDPE	Amber	48	38	100 X 64.7	140.6
1 Litre	Rectangular Bottle	583350	1140	HDPE	Natural	53	43.7	125.2 X 70.2	175
	Rectangular Bottle	583450	1140	HDPE	Amber	53	43.7	125.2 X 70.2	175
2 Litres	Rectangular Bottle + Handle	583360	2380	HDPE	Natural	63	52.3	150 X 97	240
	Rectangular Bottle + Handle	583460	2380	HDPE	Amber	63	52.3	150 X 97	240
4 Litres	Square Bottle with Handle	583258	4590	PP	Natural	100	86.1	147.2 X 147.2	293
	Square Bottle with Handle	583358	4590	HDPE	Natural	100	86.7	147.2 X 147.2	293
5 Litres	Rectangular Carboy+Stopcock	683240	6690	PP	Natural	100	86.3	229 X 144	330
	Rectangular Carboy+Stopcock	683241	6690	HDPE	Natural	100	86.3	229 X 144	330
	Jerrican	683210	8110	HDPE	Natural	53	38.9	253 X 170	329
8 Litres	Handyboy with Stopcock	683300	8600	PP	Natural	63	39	365.6 X 299.6	160
10 Litres	Rectangular Carboy+Stopcock	683250	11800	PP	Natural	100	86.3	284 X 176	389
	Rectangular Carboy+Stopcock	683242	11800	HDPE	Natural	100	87.3	284 X 176	389
	Jerrican	683220	11580	HDPE	Natural	53	38.9	282 X 189	374
20 Litres	Rectangular Carboy+Stopcock	683260	20560	PP	Natural	100	85.7	340 X 209	486
	Rectangular Carboy+Stopcock	683243	20560	HDPE	Natural	100	86.3	340 X 209	486
	Jerrican	683230	24190	HDPE	Natural	53	38.9	351 X 245	463

Resin Quick Reference Chart

	Polypropylene (PP)	Polypropylene Copolymer (PPCO)	Low Density Polypropylene (LDPE)	High Density Polypropylene (HDPE)
High Temparature	135°C	121°C	80°C	120°C
Low Temparature	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	5 PP	5 PP	4 LDPE	2 HDPE

Autoclaving Conditions

121°C

20 min

15 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 ^{0}C	Brittleness Temp ^{0}C	Transparency	Sterilization					Specific Gravity	Flexibility	Water Absorption %
				Auto-claving	Gas	Dry Heat	Radia tion	Disin-fectant			
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	Excel	<0.01
PC	135	-135	Clear	Yes +	Yes	No	No	Yes	1.20	Rigid	0.35
PMMA	50	20	Clear	No	Yes	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	Ye	Some	1.05	Rigid	0.05
PSF	165	-10	Clear	Yes	Yes	Yes +	Yes	Yes	1.24	Rigid	0.30
PTFE	270	-200	Opaque	Yes	Yes	Yes	No	Yes	2.17	Excel	<0.01
PVDF	110	-62	Translucent	Yes	Yes	No	No	Yes	1.75	Rigid	0.05
TPX*	175	20	Clear	Yes	Yes	Yes +	No	Yes	0.83	Rigid	<0.01

Sterilization

- Autoclaving (121^{0}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^{0}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*
Acids, Dilute or Weak	E	E	E	G	E	E	E	E	E	E
Acids, Strong and Concentrated	E	E	N	N	E	F	G	E	E	E
Alcohols, Aliphatic	E	E	G	N	E	E	G	E	E	E
Aldehydes	G	G	F	G	G	N	F	E	E	G
Bases	E	E	N	F	E	E	E	E	E	E
Esters	G	G	N	N	G	N	N	E	G	G
Hydrocarbons, Aliphatic	G	F	F	G	G	N	G	E	E	F
Hydrocarbons, Aromatic	G	F	N	N	F	N	N	E	E	F
Hydrocarbons, Halogenated	F	N	N	N	F	N	N	E	N	N
Ketones	G	G	N	N	G	N	N	E	N	F
Oxidizing Agents, Strong	F	F	N	N	F	N	G	E	G	F

Chemical Resistance Classification

E = Excellent - 30 days of constant exposure cause 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 after 7 days of constant exposure to the reagent like crazing, cracking, loss of strength or discoloration.

N = Not Recomended - Not for continuous use. Immediate damage may occur.

Resin Code

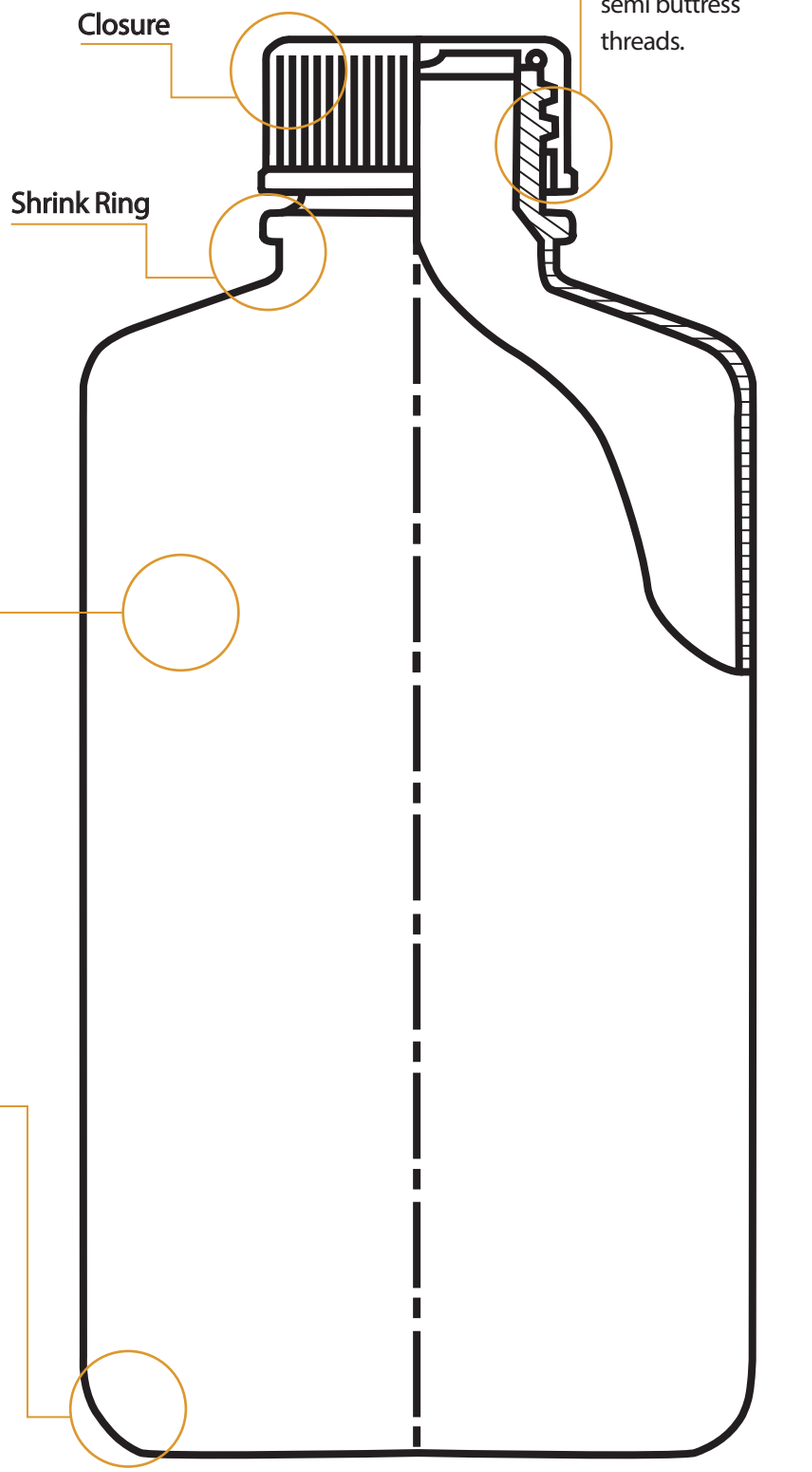
HDPE	High-density polyethylene
LDPE	Low-density polyethylene
PC	Polycarbonate
PMMA	Polymethyl methacrylate
PP	Polypropylene
PS	Polystyrene
PSF	Polysulfone
PTFE	Polytetrafluoroethylene
PVDF	Polyvinylidene fluoride
TPX	Polymethylpentene

TPX is the registered Trade Mark of Mitsui & Co. Ltd.

Tarsons

Discover reliable Bottles

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

Products listed as Autoclavable can be autoclaved at 121°C, 15 psi for 20 minutes

Tarsons

Narrow Mouth Bottles

Narrow-Mouth Bottle - PP

Tarsons Narrow-Mouth Bottles are ideal for lab applications that require excellent chemical resistance. Autoclavable with and without contents

- Caps provide the ultimate leakproof protection
- Provides excellent chemical resistance for a variety of lab applications
- Translucence provides good clarity for viewing contents
- 2, 4 and 8 L Narrow-Mouth Bottles feature a built-in shoulder loop for attaching identification tag
- Autoclavable and Leakproof

121°C
15 psi

Medical Grade Resin as per USP Class VI Plastic

Code	Capacity	Packaging Unit / Case
582070	4ml	12 / 6
582080	8ml	12 / 6
582090	15ml	12 / 6
582100	30ml	12 / 6
582110	60ml	12 / 6
582120	125ml	12 / 6
582130	250ml	12 / 6
582140	500ml	12 / 4
582150	1000ml	6 / 4
582180	2 Litres	1 / 6
582160	4 Litres	1 / 6
582190	8 Litres	1 / 6

Narrow-Mouth Bottle - LDPE

Tarsons Narrow-Mouth Bottles are ideal for lab applications that require excellent chemical resistance. Medical grade confirming to USP Class VI

- Excellent chemical resistance to most acids, bases and alcohols make this a versatile bottle
- Can be used in freezer to -100°C (-148°F) for long-term storage
- Translucence allows easy viewing of liquid levels
- Caps provide the ultimate leakproof protection

Medical Grade Resin as per USP Class VI Plastic

Code	Capacity	Packaging Unit / Case
586080	8ml	12 / 6
586090	15ml	12 / 6
586200	30ml	12 / 6
586210	60ml	12 / 6
586220	125ml	12 / 6
586230	250ml	12 / 6
586240	500ml	12 / 4
586250	1000ml	6 / 4
586260	2 Litres	1 / 6
586280	4 Litres	1 / 6
586290	8 Litres	1 / 6

Narrow-Mouth Bottle - HDPE

Tarsons Narrow Mouth Bottles are suitable for general purpose laboratory applications

- Caps ensure leakproof performance
- Reliable durability
- Can be used for packing and shipping purpose

Medical Grade Resin as per USP Class VI Plastic

Code	Capacity	Packaging Unit / Case
583170	4ml	12 / 6
583180	8ml	12 / 6
583190	15ml	12 / 6
583100	30ml	12 / 6
583110	60ml	12 / 6
583120	125ml	12 / 6
583130	250ml	12 / 6
583140	500ml	12 / 4
583150	1000ml	6 / 4

Amber Narrow-Mouth Bottle - HDPE

Tarsons Amber Narrow Mouth Rectangular Bottles help protect light sensitive liquids or dry materials from exposure

- Amber HDPE reduces UV light transmissions to protect light sensitive liquids
- Excellent chemical resistance to most acids, bases and alcohols helps these containers protect your valuable samples
- Caps provide the ultimate in leakproof protection

Medical Grade Resin as per USP Class VI Plastic

Code	Capacity	Packaging Unit / Case
581170	4ml	12 / 6
581180	8ml	12 / 6
581190	15ml	12 / 6
581200	30ml	12 / 6
581210	60ml	12 / 6
581220	125ml	12 / 6
581230	250ml	12 / 6
581240	500ml	12 / 4
581250	1000ml	6 / 4

Tarsons

Wide Mouth Bottles

Code	Capacity	Packaging Unit / Case
582200	30ml	12 / 6
582210	60ml	12 / 6
582220	125ml	12 / 6
582230	250ml	12 / 6
582240	500ml	12 / 4
582250	1000ml	6 / 4
583257	4 Litres	1 / 6
583258	4 Litres	1 / 6

Wide-Mouth Bottle - PP

Tarsons Wide-Mouth Economy Bottles are suitable for general purpose laboratory applications. Wide mouth is easy to fill

- Caps ensure leakproof performance
- Autoclavable
- Leakproof

Code	Capacity	Packaging Unit / Case
582200	30ml	12 / 6
582210	60ml	12 / 6
582220	125ml	12 / 6
582230	250ml	12 / 6
582240	500ml	12 / 4
582250	1000ml	6 / 4

Wide-Mouth Bottle - LDPE

Tarsons Wide-Mouth Bottles are suitable for general purpose laboratory applications. Wide mouth is easy to fill

- Caps ensure leakproof performance
- Leakproof

Code	Capacity	Packaging Unit / Case
584200	30ml	12 / 6
584210	60ml	12 / 6
584220	125ml	12 / 6
584230	250ml	12 / 6
584240	500ml	12 / 4
584250	1000ml	6 / 4
583257	4 Litres Round	1 / 6
583258	4 Litres Square	1 / 6

Wide-Mouth Bottle - HDPE

Tarsons Wide-Mouth Bottles are suitable for general purpose laboratory applications

- Caps ensure leakproof performance
- Reliable durability
- Can be used for packing and shipping purpose
- Leakproof

Code	Capacity	Packaging Unit / Case
581300	30ml	12 / 6
581310	60ml	12 / 6
581320	125ml	12 / 6
581330	250ml	12 / 6
581340	500ml	12 / 4
581350	1000ml	6 / 4

Amber Wide-Mouth Bottle - HDPE

Tarsons Amber Wide Mouth Rectangular Bottles help protect light sensitive liquids or dry materials from exposure

- Amber HDPE reduces UV light transmissions to protect light sensitive liquids
- Excellent chemical resistance to most acids, bases and alcohols help these containers protect your valuable samples
- Caps provide the ultimate leakproof protection

Tarsons

Heavy Duty Vacuum Bottle - PP

Tarsons Heavy Duty Vacuum Bottles are ideal for lab applications that require vacuum applications. Autoclavable with and without contents

- Thick walled Bottles can withstand repeated room temperature vacuum applications
- Use as a waste aspirator bottle or as autoclavable vessel

121°C 15 psi

Medical Grade Resin pure Packing USP Class VI

Code	Capacity	Packaging Unit / Case
583255	2 Litres	2 / 6
582255	4 Litres	1 / 6

Rectangular Bottle - HDPE

Tarsons Rectangular Bottles are ideal for long term storage. They have a sturdy uniform wall construction and straight sides that resists punctures.

- Wide Mouth closure is guaranteed Leakproof
- Bottles ideal for repeated long term use

Medical Grade Resin pure Packing USP Class VI

Code	Capacity	Packaging Unit / Case
583320	125ml	12 / 6
583330	250ml	12 / 6
583340	500ml	12 / 4
583350	1000ml	6 / 4
583360	2000ml	4 / 3

Amber Rectangular Bottle - HDPE

Tarsons Amber Rectangular Bottles help protect light sensitive liquids or dry materials from exposure

- Amber bottles reduce UV light transmission to protect light sensitive liquids
- Excellent chemical resistance to most acids, bases and alcohols
- Leakproof

Medical Grade Resin pure Packing USP Class VI

Code	Capacity	Packaging Unit / Case
583420	125ml	12 / 6
583430	250ml	12 / 6
583440	500ml	12 / 4
583450	1000ml	6 / 4
583460	2000ml	4 / 3

Filling Venting Closure

Autoclavable closure for aseptic transfer of media, biological reagents, pure water to and from heavy duty vacuum bottles and carboys

- Available in 53mm and 83 mm size
- Can be used with Tarsons Heavy Duty Bottles and Carboys

121°C 15 psi

Code	Description	Packaging Unit / Case
583216	Filling Venting Closure 52mm	1 / 1
583217	Filling Venting Closure 82mm	1 / 1

Tarsons

Experience Study Carboys

Seal Ring

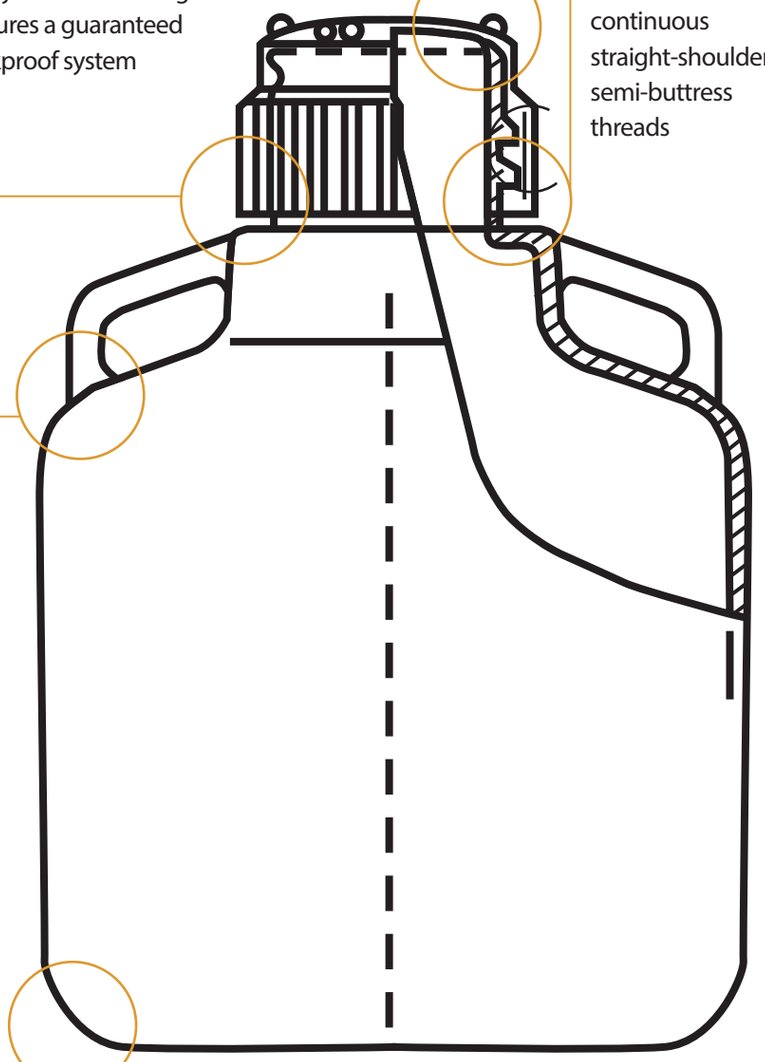
is molded inside the closure. It fits tightly against the beveled inner edge of the the bottle neck

Closure

The closure is tested to work the carboy and jerrican threading. Ensures a guaranteed leakproof system

Threads

an bottle and closures have continuous straight-shoulder semi-buttress threads



Shoulder

in built shoulders for carrying ease

Thread

carbys feature a stable base and bottom with curved inner corners for easy cleaning

Symbol Glossary

USP Class VI certified medical grade resin

Products listed as Autoclavable can be autoclaved at 121°C, 15 psi for 20 minutes

Tarsons

HDPE

Carboy & Jerrican

- Caps are leakproof PP
- Wide range including heavy-duty for extra-aggressive conditions, amber for light-sensitive products, and wide mouth design for easy filling and dispensing of liquids
- Round for homogeneous stirring
- Rectangular shape (jerrican) for efficient use of storage space

Code	Capacity	Description	Packaging Unit / Case
683210	5 lts	Jerrican with handle - HDPE	1 / 6
683220	10 lts	Jerrican with handle - HDPE	1 / 6
683230	20 lts	Jerrican with handle - HDPE	1 / 6
583252	10 lts	Round Carboy with handle - Amber HDPE	1 / 6
583253	20 lts	Round Carboy with handle - Amber HDPE	1 / 4
684300	8 lts	Handyboy with spigot - HDPE	1 / 4
683241	5 lts	Rectangular Carboy with spigot (handle) - HDPE	1 / 6
683242	10 lts	Rectangular Carboy with spigot (handle) - HDPE	1 / 6
683243	20 lts	Rectangular Carboy with spigot (handle) - HDPE	1 / 6

Recommended Applications

Media formulation and mixing, aseptic protocols, aggressive conditions or chemicals, and production where products may adhere to and leach out of containers.

LDPE

Carboy

- Leakproof PP cap for guaranteed performance
- Convenient shoulder handles for easy carrying and pouring
- Graduations for volume determination at a glance
- Wide-mouth version for easy cleaning, filling and dispensing
- Round for homogeneity during stirring

Code	Capacity	Description	Packaging Unit / Case
583371	10 lts	Carboy with Handles - LDPE	1 / 6
584402	15 lts	Carboy with Handles - LDPE	1 / 6
583372	20 lts	Carboy with Handles - LDPE	1 / 4
584430	25 lts	Carboy with Handles - LDPE	1 / 4
583373	50 lts	Carboy with Handles - LDPE	1 / 1
583471	10 lts	Wide-Mouth Carboy with Handles - LDPE	1 / 6
583472	20 lts	Wide-Mouth Carboy with Handles - LDPE	1 / 4
584401	5 lts	Carboy with Spigot - LDPE	1 / 6
584380	10 lts	Carboy with Spigot - LDPE	1 / 6
584390	20 lts	Carboy with Spigot - LDPE	1 / 4
584404	25 lts	Carboy with Spigot - LDPE	1 / 4
584400	50 lts	Carboy with Spigot - LDPE	1 / 1
586380	10 lts	Carboy with Tubulation - LDPE	1 / 6
586390	20 lts	Carboy with Tubulation - LDPE	1 / 4

Recommended Applications

- Stable at low temperature storage
- Stirring and storage of intermediates

Tarsons

Polypropylene

Carboy Autoclavable

- Leakproof PP cap for guaranteed performance
- Convenient shoulder or attached metal handles for easy carrying and pouring
- Graduations for volume determination at a glance
- Heavy-duty version for vacuum or extreme conditions
- Wide-mouth version for easy cleaning, filling and dispensing

Code	Capacity	Description	Packaging Unit / Case
583250	10 lts	Autoclavable Carboy with Handles - PP	1 / 6
583251	15 lts	Autoclavable Carboy with Handles - PP	1 / 6
583260	20 lts	Autoclavable Carboy with Handles - PP	1 / 4
583261	25 lts	Autoclavable Carboy with Handles - PP	1 / 4
583270	50 lts	Autoclavable Carboy with Handles - PP	1 / 1
583265	10 lts	Carboy Heavy Duty with Handles - PP	1 / 6
583266	20 lts	Carboy Heavy Duty with Handles - PP	1 / 4
583351	10 lts	Wide-Mouth Carboy with Handles - PP	1 / 6
583272	15 lts	Wide-Mouth Carboy with Handles - PP	1 / 6
583361	20 lts	Wide-Mouth Carboy with Handles - PP	1 / 4
583279	5 lts	Autoclavable Carboy with Spigot - PP	1 / 6
583280	10 lts	Autoclavable Carboy with Spigot - PP	1 / 6
583390	20 lts	Autoclavable Carboy with Spigot - PP	1 / 4
583263	25 lts	Autoclavable Carboy with Spigot - PP	1 / 4
583300	50 lts	Autoclavable Carboy with Spigot - PP	1 / 4
585380	10 lts	Autoclavable Carboy with Tubulation - PP	1 / 6
585390	20 lts	Autoclavable Carboy with Tubulation - PP	1 / 4
683240	5 lts	Autoclavable Rectangular Carboy with Spigot - PP	1 / 6
683250	10 lts	Autoclavable Rectangular Carboy with Spigot - PP	1 / 6
683260	20 lts	Autoclavable Rectangular Carboy with Spigot - PP	1 / 4
683300	8 lts	Autoclavable Handyboy with Spigot - PP (Stackable)	1 / 4

Recommended Applications

- Whenever autoclaving/ sterilization is necessary
- Vacuum or extreme use conditions (heavy-duty)
- As reservoir for dispensing
- Solid or powder material storage (wide-mouth)

Polypropylene

Carboy Sanitary flange/ Neck Autoclavable

- Easier to clean
- Autoclavable
- Round shape for homogeneity during stirring
- Graduations for volume determination at a glance
- Convenient shoulder handles for easy carrying

Code	Capacity	Description	Packaging Unit / Case
584301	10 lts	Carboy with Sanitary Neck - PP	1
584302	20 lts	Carboy with Sanitary Neck - PP	1
584303	50 lts	Carboy with Sanitary Neck - PP	1
584304	10 lts	Carboy with Sanitary Flange - PP	1
584305	20 lts	Carboy with Sanitary Flange - PP	1
584306	50 lts	Carboy with Sanitary Flange - PP	1

Recommended Applications

- For sterile transfer of product

Tarsons

Leak Testing

Leakage test by Vacuum Method

Product Criterion

Bottles / Vials upto 1000 ml

Sample Size

One full cycle shot quantity (Twice per shift) or as defined by customer sampling plan

Test Equipment

Vacuum Desiccator

Test Procedure

1. Fill the bottle / vial with water up to 80 % of its brim volume and secure tightly with closure by hand.
2. Invert the bottle / vial and visually check for any leakage.
3. Keep the bottle for 3 - 5 min in Vacuum Desiccator at 635 mm of Hg.
4. Release the vacuum and check for any trace of water on the threads of bottle or closure.
5. Open the closure and check for any trace of water on the threads of bottle or closure.
6. If no leakage is observed in the testing, the bottles are certified leakproof.

Leakage test by Gravity Method

Product Criterion

Bottles / Containers above 1000 ml

Sample Size

One full cycle shot quantity (Twice per shift) or as defined by customer sampling plan.

Test Procedure

1. Fill the bottles with water up to 80 % of its brim volume and secure lightly with closure by hand.
2. Invert the bottle and visually check for any leakage.
3. Leave the bottle for 24 hours in inverted condition.
4. After 24 hours, check bottle for any leakage.
5. Open the closure and check for any trace of water on the threads of bottle or closure.
6. If no leakage is observed in the testing, the bottles are certified leakproof.

Tarsons

Autoclaving Instructions

Tarsons recommends an autoclaving cycle is 121˚C, 15 psi for 20 minutes for its Polypropylene, Polycarbonate and Polymethylpentene.

Autoclaving

Procedure

a) Autoclave testing to be carried out in wet method for Polypropylene bottles and Polycarbonate flasks having 75% water filled.

b) Autoclave testing to be carried out in dry method for Polypropylene Micro Tips, Centrifuge Tubes, Funnel, etc.

c) Autoclave testing to be carried out in dry method for Polymethylpentene Lab Wares

Test Parameters

1. Temperature = 121°C
2. Pressure = 15 psi
3. Time = 20 minutes

Important Notes

- Before autoclaving , just set closure on top of the container without engaging the threads (if this is not done, pressure differentials may cause containers to collapse during autoclaving)
- For best results, use a slow exhaust cycle
- Clean and rinse item with distilled water before autoclaving
- Sterilizing reduces mechanical strength. Do not use PC vessels for vacuum application during autoclaving
- Certain chemicals which have no appreciable effect on resins at room temperature may cause deterioration at autoclavable temperature

Precautions while autoclaving Polycarbonate

- Polycarbonate must be thoroughly rinsed before autoclaving because detergent residues cause crazing and spotting
- The cycle should be limited to 20 minutes at 121°C since PC shows loss of mechanical strength after repeated autoclaving

Tarsons

Practices to avoid during Autoclaving

Autoclaving

1. **DO NOT** stack the bottles, jars and carboys
2. **DO NOT** place the product in an autoclaving basket with other objects placed on top
3. **DO NOT** tighten the closure – removing closure is safer
4. **DO NOT** place aluminum foil, gauze, cotton, tape or sterile wraps over the opening

The 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 consumer must perform all validation work regarding the procedure.

We assist with the selection of resins and list out the recommended containers for your applications.

NOTES

TARSONS PRODUCTS PVT. LTD.

GLOBAL HEADQUARTERS
31 Shakespeare Sarani
Jasmine Towers, Suite No. 213-214
Kolkata 700 017
Tel : +91-33-2289 2952 / 2289 2953 / 2289 2954 / 2289 2955

OVERSEAS OFFICE
Beijing Representative Office:
Suite A11, 10th Floor,
Twin Towers (East),
B12 Jianguomenwai Ave.,
Chaoyang District,
Beijing
Mobile: +86 13810351384, +86 13472817692 (China)

email : info@tarsons.in
Website: www.tarsons.com