



Bottles & Carboys
you can trust...

# MANAGEMENT SYSTEM

CERTIFICATE Initial certification date: 10, September, 2009

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

Certificate No: 184381-2035-AQ-END-RVA

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 lat









# Management System Certificate

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

Initial Cerasication Date:

This is to certify that the management system of: Tarsons Products Pvt.Ltd.

Jasmine Towers, Suite Number 213 - 214, 31 Shakespeare Sarani, Kolkata - 700 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: Hevik, 12 April 2018





# Bottles and Carboys

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### **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.



# Top reasons why Tarsons is reliable

- 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.





# 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<br>Capacity | Description          | Catalog<br>Number | Approx. Brim<br>Capacity ml | Material | Colour             | Screw<br>Closure | I.D. Neck<br>mm | O.D. Bottle | Approx. Hgt<br>without |
|---------------------|----------------------|-------------------|-----------------------------|----------|--------------------|------------------|-----------------|-------------|------------------------|
|                     | Bottle NM            | 582070            | 4.3                         | PP       | Natural            | 13               | 8.3             | 15.8        | Closure mm<br>38.6     |
| 4 ml                | 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                   |
|                     |                      |                   |                             |          |                    |                  |                 |             |                        |
|                     | Bottle NM            | 582080            | 11.1                        | PP       | Natural            | 20               | 13.4            | 25          | 42.3                   |
| 9 ml                | Bottle NM            | 586080            | 11.1                        | LDPE     | Natural            | 20               | 13.4            | 24.7        | 42.3                   |
| 8 ml                | 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                   |
|                     |                      |                   |                             |          |                    |                  |                 |             |                        |
|                     | Bottle NM            | 582090            | 16.8                        | PP       | Natural            | 20               | 13.5            | 25          | 56                     |
| 15                  | Bottle NM            | 586090            | 16.8                        | LDPE     | Natural            | 20               | 13.3            | 24.8        | 56                     |
| 15 ml               | 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                   |
|                     |                      |                   |                             |          |                    |                  |                 |             |                        |
|                     | 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                   |
| 30 ml               | Bottle NM            | 581200            | 35                          | HDPE     | Amber              | 20               | 13.5            | 36.3        | 59.5                   |
| 301111              | 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                   |
|                     |                      |                   |                             |          |                    |                  |                 |             |                        |
|                     | 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                     |
| 60 ml               | 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                   |
|                     | 1                    |                   |                             |          |                    |                  |                 |             |                        |
|                     | 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                   |
| 125 ml              | 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                   |
|                     | Pottle NAA           | E02120            | 200                         | DD       | Matural            | 24               | 177             | 61.5        | 121.7                  |
|                     | 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                  |
| 250 ml              | 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  Bottle WM | 585230<br>584230  | 295                         | HDPE     | Natural<br>Natural | 43               | 33.1            | 61.2        | 127.7                  |
|                     |                      |                   |                             |          |                    | 43               |                 |             |                        |
|                     | Bottle WM            | 581330            | 295                         | HDPE     | Amber              | 43               | 32.8            | 60.9        | 127                    |

| Bottle NM  | Nominal<br>Capacity | Description                 | Catalog<br>Number | Approx. Brim<br>Capacity ml | Material | Colour  | Screw<br>Closure | I.D. Neck<br>mm | O.D. Bottle<br>mm | Approx. Hgt<br>without<br>Closure mm |
|--|---------------------|-----------------------------|-------------------|-----------------------------|----------|---------|------------------|-----------------|-------------------|--------------------------------------|
| Bottle NM  |                     | Bottle NM                   | 582140            | 540                         | PP       | Natural | 28               | 21.2            | 73.5              | 168                                  |
| Bottle NM  |                     | Bottle NM                   | 586240            | 540                         | LDPE     | Natural | 28               | 21.2            | 72.8              | 168                                  |
| Bottle NM   S82140   S97   P   Natural   38   28.2   75.2   11   |                     | Bottle NM                   | 583140            | 540                         | HDPE     | Natural | 28               | 21.1            | 73                | 168                                  |
| Bottle WM   \$82240   568   PP   Natural   \$3   43.8   73.1   10  |                     | Bottle NM                   | 581240            | 540                         | HDPE     | Amber   | 28               | 21.1            | 73                | 168                                  |
| Bottle WM  | 500 ml              |                             |                   |                             |          |         |                  |                 |                   | 180                                  |
| Bottle WM   \$84240   \$568   HDPE   Natural   \$53   44   72.7   10   |                     |                             |                   |                             |          |         |                  |                 |                   | 164                                  |
| Bottle WM   \$81340   \$568   HDPE   Amber   \$3   \$44   \$72.7   \$16   \$1 |                     |                             |                   |                             |          |         |                  |                 |                   | 164                                  |
| Bottle NM  |                     |                             |                   |                             |          |         |                  |                 |                   | 164                                  |
| Bottle NM  |                     | Bottle WM                   | 581340            | 568                         | HDPE     | Amber   | 53               | 44              | 72.7              | 164                                  |
| Bottle NM  |                     | Dottle NIM                  | 502150            | 1100                        | DD       | Natural | 20               | 27.0            | 03.0              | 214                                  |
| Bottle NM  |                     |                             |                   |                             |          |         |                  |                 |                   | 214                                  |
| Bottle NM  |                     |                             |                   |                             |          |         |                  |                 |                   | 214                                  |
| Bottle WM  |                     |                             |                   |                             |          |         |                  |                 |                   | 214                                  |
| Bottle WM  | 1 litre             |                             |                   |                             |          |         |                  |                 |                   | 195                                  |
| Bottle NM  |                     |                             |                   |                             |          |         |                  |                 |                   | 195                                  |
| Bottle NM  |                     |                             |                   |                             |          |         |                  |                 |                   | 195                                  |
| Bottle NM  |                     |                             |                   |                             |          |         |                  |                 |                   | 195                                  |
| Bottle NM  |                     |                             |                   |                             |          |         |                  |                 |                   |                                      |
| Bottle WM  |                     | Bottle NM                   | 582180            | 2082                        | PP       | Natural | 38               | 26.9            | 120               | 247                                  |
| Bottle NM  |                     | Bottle NM                   | 586260            | 2082                        | LDPE     | Natural | 38               | 26.9            | 119               | 246                                  |
| Bottle WM  |                     | Bottle WM                   | 582260            | 2260                        | PP       | Natural | 100              | 90.5            | 119.5             | 236                                  |
| Bottle WM  | 2 litres            | Bottle NM                   | 585260            | 2260                        | LDPE     | Natural | 100              | 90.2            | 119.2             | 236                                  |
| Heavy Duty Vacuum Bottle   | 2 111103            | Bottle WM                   | 584260            | 2260                        | HDPE     | Natural | 100              | 90.8            | 119               | 236                                  |
| Bottle NM  |                     | Bottle WM                   | 581360            | 2260                        | HDPE     | Amber   | 100              | 90.8            | 199               | 236                                  |
| Bottle NM  |                     | Heavy Duty Vacuum Bottle    | 583225            | 2250                        | PP       | Natural | 53               | 38.4            | 118.75            | 258                                  |
| Bottle NM  |                     |                             |                   |                             |          |         |                  |                 |                   |                                      |
| Bottle NM  |                     | Bottle NM                   | 582160            | 4360                        | PP       | Natural | 38               | 27              | 153               | 330                                  |
| Bottle WM with handle  |                     | Bottle NM                   | 582170            | 4360                        | PP       | Amber   | 38               | 27              | 153               | 330                                  |
| Bottle NM with handle  |                     | Bottle NM                   | 586280            | 4360                        | LDPE     | Natural | 38               | 27              | 153               | 408                                  |
| Heavy Duty Vacuum Bottle   | 4 litres            | Bottle WM with handle       | 583257            | 4500                        | PP       | Natural | 100              | 86.7            | 163               | 293                                  |
| Solitres   |                     | Bottle NM with handle       | 583357            | 4500                        | HDPE     | Natural | 100              | 86.7            | 163               | 293                                  |
| Bottle NM  |                     | Heavy Duty Vacuum Bottle    | 582255            | 4100                        | PP       | Natural | 83               | 65              | 154               | 336                                  |
| Bottle NM  | - •-                |                             |                   |                             |          |         |                  |                 |                   |                                      |
| Carboy NM  | 5 litres            | Aspirator Bottle w/Stopcock | 583210            | 5400                        | PP       | Natural | 53               | 43.8            | 168               | 345                                  |
| Carboy NM  |                     | D. M. NIM                   | 502100            | 0500                        | DD       | Nistand | 52               | 20.1            | 105               | 400                                  |
| Carboy NM  | 8 litres            |                             |                   |                             |          |         |                  |                 |                   | 408                                  |
| Carboy NM   583252   11840   HDPE   Amber   83   65   249   33   |                     | BOTTIE INIVI                | 580290            | 8500                        | LDPE     | Naturai | 55               | 39.1            | 195               | 408                                  |
| Carboy NM   583252   11840   HDPE   Amber   83   65   249   33   |                     | Carboy NM                   | 583250            | 11500                       | PP       | Natural | 83               | 65              | 249               | 376                                  |
| Carboy NM  |                     |                             |                   |                             |          |         |                  |                 |                   | 376                                  |
| Carboy Wide Mouth  |                     |                             |                   |                             |          |         |                  |                 |                   | 376                                  |
| Carboy Wide Mouth  |                     |                             |                   |                             |          |         |                  |                 |                   | 331                                  |
| Carboy with Stopcock   |                     |                             |                   |                             |          |         |                  |                 |                   | 331                                  |
| Carboy with Stopcock 584380 11460 LDPE Natural 83 65 249 33 Carboy with Tubulation 585380 11460 PP Natural 83 65 249 33 Carboy with Tubulation 586380 11460 LDPE Natural 83 65 249 33 Aspirator Bottle w/Stopcock 583220 10500 PP Natural 53 43.5 200 44  Carboy NM 583260 22000 PP Natural 83 65 285 55 Carboy Wide Mouth 583372 22000 LDPE Natural 83 65 285 55 Carboy Wide Mouth 583472 22000 LDPE Natural 100 85.6 285 45 Carboy Wide Mouth 583472 22000 LDPE Natural 100 85.6 285 45 Carboy with Stopcock 583290 21500 PP Natural 83 65 285 55 Carboy with Stopcock 584390 21500 LDPE Natural 83 65 285 55 Carboy with Tubulation 585390 21500 LDPE Natural 83 65 285 55 Carboy with Tubulation 586390 21500 LDPE Natural 83 65 285 55 Carboy with Tubulation 586390 21500 LDPE Natural 83 65 285 55 Carboy with Tubulation 586390 21500 LDPE Natural 83 65 285 55  | 10 liture           |                             |                   |                             |          |         |                  |                 |                   | 376                                  |
| Carboy with Tubulation 585380 11460 PP Natural 83 65 249 33 Carboy with Tubulation 586380 11460 LDPE Natural 83 65 249 33 Aspirator Bottle w/Stopcock 583220 10500 PP Natural 53 43.5 200 44  Carboy NM 583260 22000 PP Natural 83 65 285 55 Carboy Wide Mouth 583372 22000 LDPE Natural 83 65 285 55 Carboy Wide Mouth 583361 22000 PP Natural 100 85.6 285 45 Carboy Wide Mouth 583472 22000 LDPE Natural 100 85.6 285 45 Carboy with Stopcock 583290 21500 PP Natural 83 65 285 55 Carboy with Stopcock 584390 21500 LDPE Natural 83 65 285 55 Carboy with Tubulation 585390 21500 PP Natural 83 65 285 55 Carboy with Tubulation 585390 21500 LDPE Natural 83 65 285 55 Carboy with Tubulation 586390 21500 LDPE Natural 83 65 285 55 Carboy with Tubulation 586390 21500 LDPE Natural 83 65 285 55  | 10 litres           | <u> </u>                    |                   |                             |          |         |                  |                 |                   | 376                                  |
| Aspirator Bottle w/Stopcock 583220 10500 PP Natural 53 43.5 200 43.5  Carboy NM 583260 22000 PP Natural 83 65 285 57  Carboy NM 583372 22000 LDPE Natural 83 65 285 57  Carboy Wide Mouth 583361 22000 PP Natural 100 85.6 285 47  Carboy Wide Mouth 583472 22000 LDPE Natural 100 85.6 285 47  Carboy Wide Mouth 583472 22000 LDPE Natural 100 85.6 285 47  Carboy with Stopcock 583290 21500 PP Natural 83 65 285 57  Carboy with Stopcock 584390 21500 LDPE Natural 83 65 285 57  Carboy with Tubulation 585390 21500 PP Natural 83 65 285 57  Carboy with Tubulation 586390 21500 LDPE Natural 83 65 285 57  Carboy with Tubulation 586390 21500 LDPE Natural 83 65 285 57   |                     | , ,                         |                   |                             |          |         |                  |                 |                   | 376                                  |
| Carboy NM 583260 22000 PP Natural 83 65 285 57  Carboy NM 583372 22000 LDPE Natural 83 65 285 57  Carboy Wide Mouth 583361 22000 PP Natural 100 85.6 285 47  Carboy Wide Mouth 583472 22000 LDPE Natural 100 85.6 285 47  Carboy Wide Mouth 583472 22000 LDPE Natural 100 85.6 285 47  Carboy with Stopcock 583290 21500 PP Natural 83 65 285 57  Carboy with Stopcock 584390 21500 LDPE Natural 83 65 285 57  Carboy with Tubulation 585390 21500 PP Natural 83 65 285 57  Carboy with Tubulation 586390 21500 LDPE Natural 83 65 285 57  |                     | Carboy with Tubulation      | 586380            | 11460                       | LDPE     | Natural | 83               | 65              | 249               | 376                                  |
| Carboy NM   583372   22000   LDPE   Natural   83   65   285   57   |                     | Aspirator Bottle w/Stopcock | 583220            | 10500                       | PP       | Natural | 53               | 43.5            | 200               | 453                                  |
| Carboy NM   583372   22000   LDPE   Natural   83   65   285   57   |                     |                             |                   |                             |          |         |                  |                 |                   |                                      |
| Carboy Wide Mouth   583361   22000   PP   Natural   100   85.6   285   43   20   20   20   20   20   20   20   2   |                     | Carboy NM                   | 583260            | 22000                       | PP       | Natural | 83               | 65              | 285               | 518                                  |
| Carboy Wide Mouth  |                     | Carboy NM                   | 583372            | 22000                       | LDPE     | Natural | 83               | 65              | 285               | 518                                  |
| Carboy with Stopcock         583290         21500         PP         Natural         83         65         285         57           Carboy with Stopcock         584390         21500         LDPE         Natural         83         65         285         57           Carboy with Tubulation         585390         21500         PP         Natural         83         65         285         57           Carboy with Tubulation         586390         21500         LDPE         Natural         83         65         285         57  |                     | Carboy Wide Mouth           | 583361            | 22000                       | PP       | Natural | 100              | 85.6            | 285               | 472                                  |
| Carboy with Stopcock 584390 21500 LDPE Natural 83 65 285 50 Carboy with Tubulation 585390 21500 PP Natural 83 65 285 50 Carboy with Tubulation 586390 21500 LDPE Natural 85 65 285 50 Carboy with Tubulation 586390 21500 21500 21500 21500 21500 21500 21500 21500 21500 21500 21500 21500 21500 21500 21500 21500 21   |                     | Carboy Wide Mouth           | 583472            | 22000                       | LDPE     | Natural | 100              | 85.6            | 285               | 472                                  |
| Carboy with Tubulation         585390         21500         PP         Natural         83         65         285         57           Carboy with Tubulation         586390         21500         LDPE         Natural         83         65         285         57  | 20 litres           | Carboy with Stopcock        | 583290            | 21500                       | PP       | Natural | 83               | 65              | 285               | 518                                  |
| Carboy with Tubulation 586390 21500 LDPE Natural 83 65 285 5   |                     |                             |                   |                             |          |         |                  |                 |                   | 518                                  |
|  |                     |                             |                   |                             |          |         |                  |                 |                   | 518                                  |
| Aspirator Bottle w/Stopcock 583230 22700 PP Natural 53 43.8 265 5.   |                     |                             |                   |                             |          |         |                  |                 |                   | 518                                  |
|  |                     | Aspirator Bottle w/Stopcock | 583230            | 22700                       | PP       | Natural | 53               | 43.8            | 265               | 533                                  |
|  |                     |                             |                   |                             |          |         |                  |                 |                   |                                      |
| · ·  |                     |                             |                   |                             |          |         |                  |                 |                   | 665                                  |
| 50 litres  | 50 litres           | •                           |                   |                             |          |         |                  |                 |                   | 665                                  |
| Carboy with Stopcock 583300 54360 PP Natural 83 65 376 66  |                     |                             |                   |                             |          |         |                  |                 |                   | 665                                  |
| Carboy with Stopcock 584400 54360 LDPE Natural 83 65 376 66  |                     | Carboy with Stopcock        | 584400            | 54360                       | LDPE     | Natural | 83               | 65              | 3/6               | 665                                  |

### **Square Bottle & Carboys**

| Nominal<br>Capacity | Description                 | Catalog<br>Number | Approx. Brim<br>Capacity ml | Material | Colour             | Screw<br>Closure mm | Approx.<br>I.D. Neck<br>mm | Approx. Bottle<br>O.D. (L X W)<br>mm | Approx. Hgt<br>without<br>Closure mm |
|---------------------|-----------------------------|-------------------|-----------------------------|----------|--------------------|---------------------|----------------------------|--------------------------------------|--------------------------------------|
| 125 ml              | Rectangular Bottle          | 583320            | 139.6                       | HDPE     | Natural            | 28                  | 21.1                       | 60 X 39.4                            | 97.3                                 |
| 123 1111            | 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                                  |
| 250 1111            | 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                                |
| 3001111             | 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                                  |
| 2 2.1.1.03          | 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                                  |
|                     |                             | 602240            |                             |          |                    | 100                 | 0.6.2                      | 222 7/444                            | 220                                  |
|                     | Rectangular Carboy+Stopcock | 683240            | 6690                        | PP       | Natural            | 100                 | 86.3                       | 229 X 144                            | 330                                  |
| 5 Litres            | 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                                  |
| 0.1.1               |                             |                   |                             |          |                    |                     |                            |                                      |                                      |
| 8 Litres            | Handyboy with Stopcock      | 683300            | 8600                        | PP       | Natural            | 63                  | 39                         | 365.6 X 299.6                        | 160                                  |
|                     | Rectangular Carboy+Stopcock | 683250            | 11800                       | PP       | Natural            | 100                 | 86.3                       | 284 X 176                            | 389                                  |
| 101:+               | Rectangular Carboy+Stopcock | 683250            | 11800                       | HDPE     |                    | 100                 | 87.3                       |                                      | 389                                  |
| 10 Litres           | Jerrican                    | 683242            | 11580                       | HDPE     | Natural<br>Natural | 53                  | 38.9                       | 284 X 176<br>282 X 189               | 374                                  |
|                     | Jenican                     | 003220            | 11300                       | TUFL     | ivatural           | JJ                  | 30.9                       | 202 A 109                            | 3/4                                  |
|                     | Rectangular Carboy+Stopcock | 683260            | 20560                       | PP       | Natural            | 100                 | 85.7                       | 340 X 209                            | 486                                  |
| 20 Litres           | Rectangular Carboy+Stopcock | 683243            | 20560                       | HDPE     | Natural            | 100                 | 86.3                       | 340 X 209                            | 486                                  |
| 20 Little3          | Jerrican                    | 683230            | 24190                       | HDPE     | Natural            | 53                  | 38.9                       | 351 X 245                            | 463                                  |
|                     | Jenneum                     | 303230            | 21170                       | . 101 L  | Hatarai            | - 55                | 50.5                       | 331 N Z 13                           | 103                                  |

### **Resin Quick Reference Chart** Polypropylene (PP) Polypropylene Copolymer (PPCO) Low Density Polypropylene (LDPE) High Density Polypropylene (HDPE) High 121°C 80°C 120°C Temparature 135°C Low 0°C - 40°C -100°C -100°C Temparature Autoclavable Ν Ν Microwavable Marginal Dry Heat (Oven) Ν Ν Ν Ν Freeze Ν Excellent Flexibility Rigid Moderate Rigid Clarity Translucent Translucent Translucent Translucent Recycling Symbol

### **Autoclaving Conditions**



### 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**

|       | Max            | Brittleness |              |                  |     | Sterilizati | on            |                   | Specific | Flexibility | Water        |
|-------|----------------|-------------|--------------|------------------|-----|-------------|---------------|-------------------|----------|-------------|--------------|
| Resin | Use<br>Temp ⁰C | Temp °C     | Transparency | Auto-<br>claving | Gas | Dry<br>Heat | Radia<br>tion | Disin-<br>fectant | Gravity  |             | Absorption % |
| 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 (121ºC, 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 | РР | PS | PSF | PTFE | PVDF | TPX* |
|---|------|------|----|------|----|----|-----|------|------|------|
| Acids, Dilute or Weak                     | Е    | Е    | Е  | G    | Е  | Е  | E   | Е    | Е    | Е    |
| Acids, Strong and Concentrated            | Е    | Е    | N  | N    | Е  | F  | G   | Е    | Е    | E    |
| Alcohols, Aliphatic                       | Е    | Е    | G  | N    | Е  | Е  | G   | Е    | Е    | E    |
| Aldehydes                                 | G    | G    | F  | G    | G  | Ν  | F   | Е    | Е    | G    |
| Bases                                     | Е    | Е    | N  | F    | Е  | Е  | Е   | Е    | Е    | Е    |
| Esters                                    | G    | G    | N  | N    | G  | N  | N   | Ш    | G    | G    |
| Hydrocarbons, Aliphatic                   | G    | F    | F  | G    | G  | Ν  | G   | Ш    | Е    | F    |
| Hydrocarbons, Aromatic                    | G    | F    | Z  | N    | F  | Z  | N   | ш    | Ш    | F    |
| Hydrocarbons, Halogenated                 | F    | N    | Ν  | N    | F  | Z  | Ν   | Ш    | N    | N    |
| Ketones                                   | G    | G    | N  | N    | G  | Ν  | N   | Ш    | N    | F    |
| Oxidizing Agents, Strong                  | F    | F    | N  | N    | F  | N  | G   | Е    | 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.

# 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.

Uniform Thickness



### **Bottom**

curved inner corners for superior cleaning

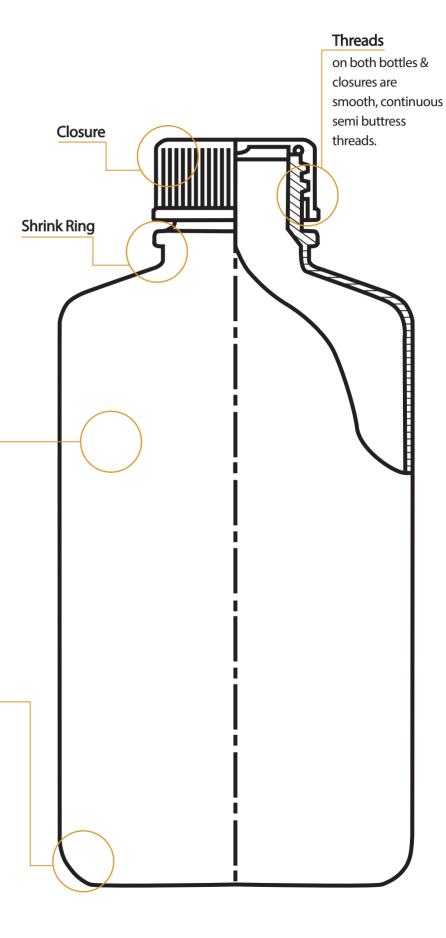
### **Symbol Glossary**



USP Class VI certified medical grade resin



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



### 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

| Code   | Capacity | 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         |



121°C

| Narrow- | Mouth | Rottle - | I DPF |
|---------|-------|----------|-------|

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

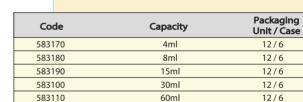
| Code   | Capacity | Packaging<br>Unit / Case |
|--------|----------|--------------------------|
| 586080 | 8ml      | 12/6                     |
| 586090 | 15ml     | 12/6                     |
| 586200 | 30ml     | 12/6                     |
| 586210 | 60ml     | 12/6                     |
| 586220 | 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



125ml

250ml

500ml

1000ml

12/6

12/6

12/4

6/4



583120

583130

583140

583150

### 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



| Code   | Capacity | Packaging<br>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                      |

### Wide Mouth **Bottles**

| Code   | Capacity | Packaging<br>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<br>Unit / Case |
|--------|----------|--------------------------|
| 585200 | 30ml     | 12/6                     |
| 585210 | 60ml     | 12/6                     |
| 585220 | 125ml    | 12/6                     |
| 585230 | 250ml    | 12/6                     |
| 585240 | 500ml    | 12/4                     |
| 585250 | 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<br>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                      |





| Code   | Capacity | Packaging<br>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                      |
|        |          |                          |



### 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

### 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



### 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 0  |
|--------|
| 15 psi |

| Code   | Capacity | Packaging<br>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



| Code   | Capacity | Packaging<br>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



| Code   | Capacity | 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℃   |
|--------|
| 15 psi |
| 15 psi |

| Code   | Description                  | Packaging<br>Unit / Case |
|--------|------------------------------|--------------------------|
| 583216 | Filling Venting Closure 52mm | 1/1                      |
| 583217 | Filling Venting Closure 82mm | 1/1                      |

### Experience Sturdy 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 on the carboy and jerrican threading. Ensures a guaranteed leakproof system

### **Threads**

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



### Shoulder

in built shoulders for carrying ease

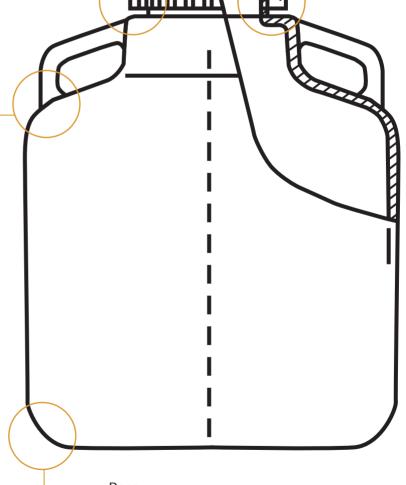
### **Symbol Glossary**



USP Class VI certified medical grade resin



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



### Base

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

### **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

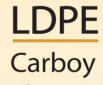
| Code   | Capacity | Description                                    | Packaging<br>Unit / Case |
|--------|----------|--|--------------------------|
| 683210 | 5 lts    | Jerrican with handle - HDPE                    | 1/6                      |
| 683220 | 10 lts   | Jerrican with handle - HDPE                    | 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.

- 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<br>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

### Polypropylene

### Carboy Autoclavable





### 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





### Recommended Applications

For sterile transfer of product

- 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<br>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                      |

- 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<br>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                        |

### **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.

### **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

# 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

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