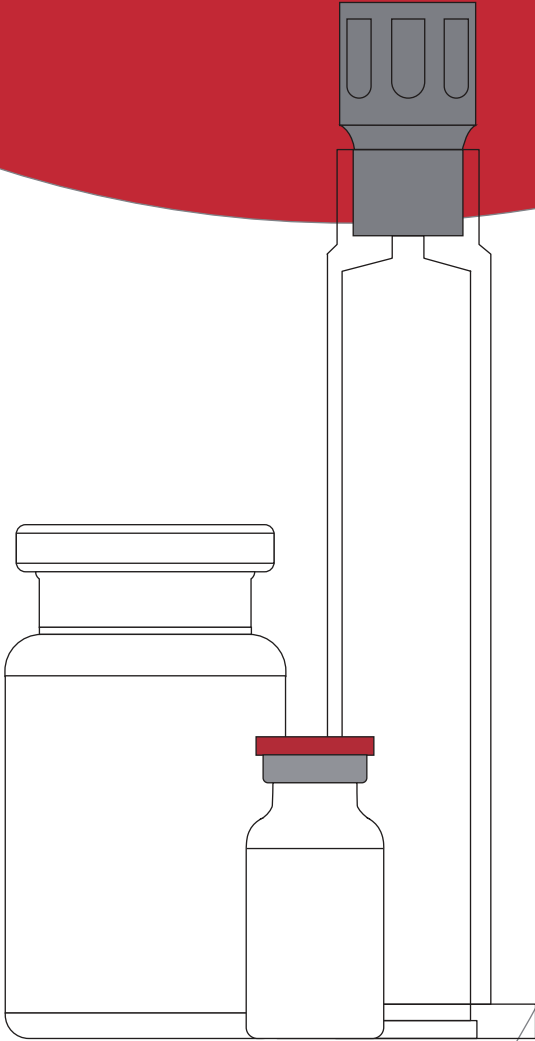


**Tofflon**

The world expert of serving biopharmaceutical

PHARMACEUTICAL  
PACKAGING  
SOLUTIONS



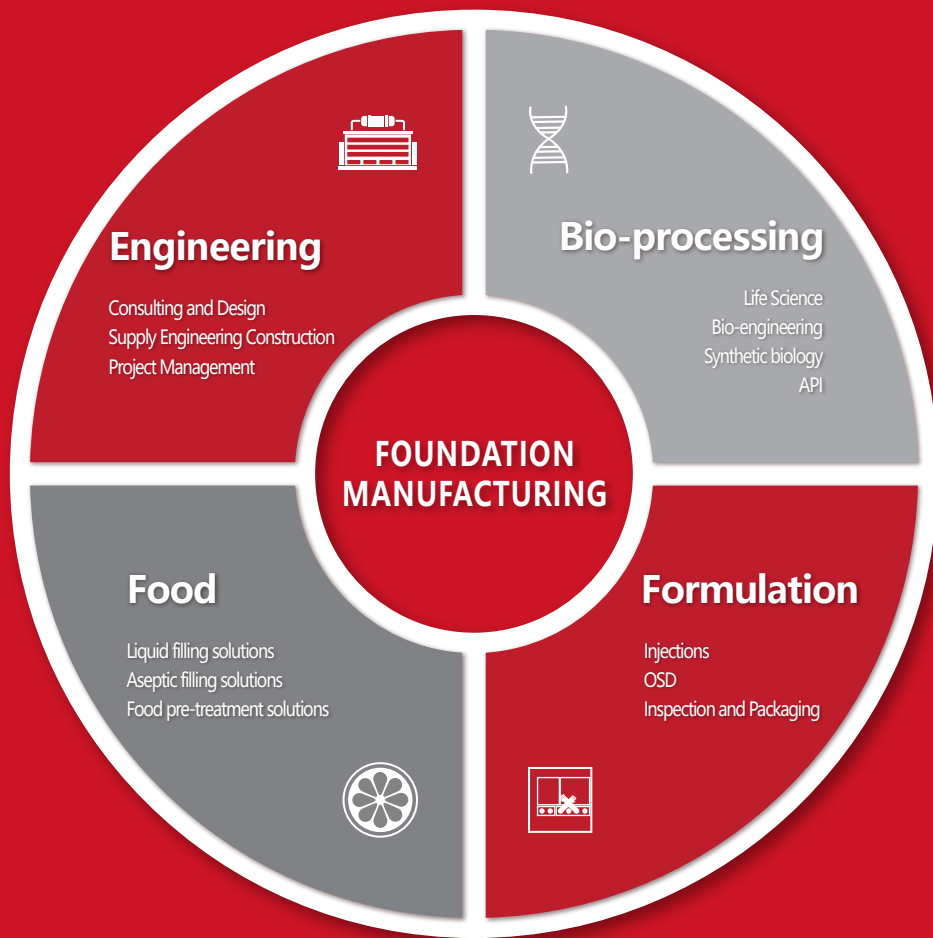


Tofflon Science and Technology Group Co., Ltd. (SZ:300171) was established in 1993 and is headquartered in Shanghai. It is listed on the China Stock Exchange and offers a full range of process research, core equipment, consumables, and total system engineering solutions for drug and food manufacturing worldwide. With a focus on drug manufacturing science and pharmaceutical equipment manufacturing, it caters to the research, pilot, and commercial production stages and serves over 3,000 companies globally.

Tofflon has established strong partnerships with prominent domestic and international pharmaceutical companies, amassing extensive expertise in pharmaceutical engineering technology, core equipment manufacturing, and engineering design. Our focus on cutting-edge technology in the pharmaceutical industry drives us to explore innovative drug manufacturing models and build advanced drug manufacturing platforms. As a result, Tofflon has evolved from a "system solution provider" to a "provider of smart pharmaceutical factories."

# TOFFLON BUSINESS SCOPE

● ENGINEERING ● BIO-PROCESSING ● FORMULATION ● FOOD



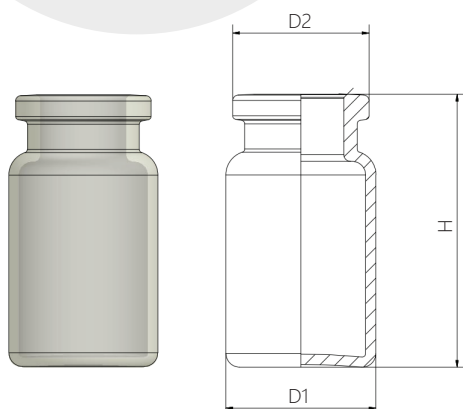
# CONTENT



COP VIALS .....	01
COP SYRINGES .....	02
GLASS VIALS & GLASS CARTRIDGES .....	03
VIAL STOPPERS & SYRINGE PLUNGERS & CARTRIDGES PLUNGERS .....	04

## COP VIALS

The COP Vials are a packaging solution that offer the best of both plastic and glass materials for liquid medication. Constructed with a monolayer structure of cyclic olefin polymer (COP), this vial boasts an inert contact surface and chemical-physical properties that make it ideal for various applications, from biologicals and vaccines to small molecule formulations and radiopharmaceuticals. Its unique packaging design provides manufacturers of toxic or high value drugs with added security. The key dimensions of the COP Vials comply with ISO 8362 standards, but can also be tailored to meet specific customer requirements.



### KEY FEATURES

1. New Cyclo Olefin Polymers (COP)
2. Minimal Extractables and Leachables, perfect biocompatibility
3. Low protein adsorption, good drug compatibility
4. Reacts inertly to high or low PH values (no stratification)
5. No heavy metal release.
6. Reliability under Cryogenic temperatures(-196°C)

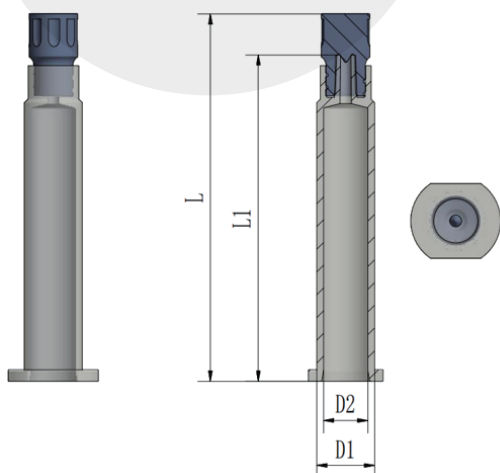


Specification	Diameter (mm)	Height (mm)	Diameter of bottle mouth (mm)	Amount(PCS)
2R	16	35	13	100
3R	16	40	13	100
4R	22	45	13	100
6R	22	40	20	48
8R	24	45	20	48
10R	24	45	20	48
15R	30	60	20	48
20R	30	55	20	24
25R	30	65	20	24
30R	30	75	20	24
50R	40	73	20	16



## COP SYRINGES

We offer a variety of volumes, ranging from small volumes (0.5 ml - 5 ml) to large volumes (10 ml, 20 ml, and 50 ml) in syringes. Our injection molding process, paired with our COP raw materials, allows for flexibility in design to create personalized solutions for specific pharmaceutical needs.



### KEY FEATURES

1. High fracture resistance
2. More stringent tolerances than glass
3. Minimal Extractables and Leachables, good biocompatibility
4. Low protein adsorption, good drug compatibility
5. Precise drug dosing through minimal residuals
6. No heavy metal release.
7. Multiple design options, high degree of flexibility to meet specific customer requirements.



Specification	Inner diameter	Outer diameter	Length (mm)	Total length	Amount(PCS)
0.5ml	4.65	9.5	57	65	100
1ml Long	6.5	9.5	64.5	72.6	100
1ml	8.75	11.4	45.9	54	100
2.25ml	8.75	11.4	64.4	72.5	48
3ml	8.75	11.6	82.4	90.5	48
5ml	12.2	15	76.9	85	48
10ml	14.7	18	97.7	105.8	48
20ml	18.2	21.6	120.2	128.3	24
50ml	27.9	31.5	128.8	136.9	24



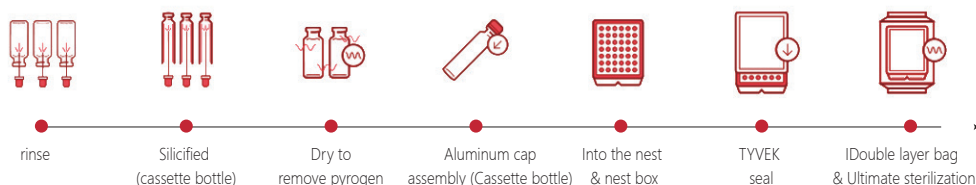
## GLASS VIALS & GLASS CARTRIDGES

Tofflon TOFX® provides a full selection of clean and sterile glass containers for pharmaceutical use, including vials and cartridges. By contrast to conventional production lines that employ bulk glass containers, TOFX® can considerably decrease the expenses associated with line acquisition, validation, and maintenance, which allows pharmaceutical companies to concentrate on their primary business goals while keeping costs in check.

TOFX® is the perfect packaging for small batches and industrial production. The nesting board box format solves the problem of converting different glass containers.

### KEY ADVANTAGES

1. Direct-fill glass containers are available to help companies reduce time to market
2. By separating the containers in the secondary packaging, we can prevent glass from coming into contact with other glass. This reduces the occurrence of breakage and the generation of particles. Ultimately, this improves the overall quality of the product.
3. Easy and fast change of packaging (vials, cartridges, syringes) to help companies achieve flexible production
4. Reduce investment in plant and facilities for pharmaceutical companies to help them focus on their core business



### Vials | Nesting Board Box



In the nesting box of the nesting plate with the mouth of the bottle upwards

Specification	Diameter(mm)	Height(mm)	Diameter of bottle mouth	Amount(PCS)
2R	16	35	13	100
3R	16	40	13	100
4R	22	45	13	100
6R	22	40	20	48
8R	24	45	20	48
10R	24	45	20	48
15R	30	60	20	48
20R	30	55	20	24
25R	30	65	20	24
30R	30	75	20	24
50R	40	73	20	16

### Cartridges | Nesting Board Box



Specification	Diameter(mm)	Height(mm)	Diameter(mm)	Amount(PCS)
1.5ml	8.65	56.93	7.15mm	100
3ml	11.6	62.3	7.15mm	100



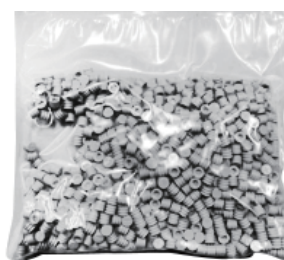
In nesting boxes with mouth up, pre-rolled cap

## Vial stoppers & Syringe plungers & Cartridges plungers

At Tofflon, we utilize our knowledge in sterilization solutions to provide a Ready-to-Use (RTU) component platform. This comprehensive sealing solution includes vial, pre-filled syringe, and cartridge sealing options to ensure drug and packaging stability, compatibility, and seal integrity. Our customers benefit from this added value by freeing up resources to focus on their core business - manufacturing and filling pharmaceutical products.

### KEY FEATURES

1. Available as a laminated or non-laminated product.
2. Available in two packaging formats.



### Vials sealing solutions



Specification	lamination	Non-lamination	Forms of supply
13mmWater needle stopper	■	■	Ready-to-Use (RTU)
13mmWater needle stopper	■	■	Ready-to-Use (RTU)
20mmWater needle stopper	■	■	Ready-to-Use (RTU)
20mmWater needle stopper	■	■	Ready-to-Use (RTU)

### Pre-filled syringes sealing solutions



Specification	lamination	Non-lamination	Forms of supply
0.5ml	■	■	Ready-to-Use (RTU)
1ml Long	■	■	Ready-to-Use (RTU)
1 to 3 ml	■	■	Ready-to-Use (RTU)
5 ml	■	■	Ready-to-Use (RTU)

### Cartridges sealing solutions



Specification	Main dimensions <sub>(mm)</sub>			Glass ratios
	Total height	Stopper size	Stopper diameter	Inner diameter <sub>(mm)</sub>
1.5ML	6.0	7.2	6.5	6.85
3 ML	8.13	10.0	8.77	9.65



[www.tofflon.com](http://www.tofflon.com)

**Tofflon**

**Tofflon Science and Technology Group Co., Ltd.**

1509 Minhang Duhui Road, Shanghai, China

Investor Relations	Domestic Sales Division
Tel: +86 21 6490 9699	Tel: +86 21 6490 6201
Fax: +86 21 6490 9369	Fax: +86 21 5446 9978
Email: <a href="mailto:dfi@tofflon.com">dfi@tofflon.com</a>	Email: <a href="mailto:sales@tofflon.com">sales@tofflon.com</a>
Service Email: <a href="mailto:fuwu@tofflon.com">fuwu@tofflon.com</a>	
Tel: 400 030 6600	



This document is protected by Tofflon's copyright and may not be reproduced by any individual or entity. Certain images and data may differ from the standard configuration, and Tofflon retains the right to make changes. For further details, please refer to the official website of the company.