Cryogenic Tubes

Cryogenic tubes, also known as freezing tubes, are commonly used for low-temperature preservation. They are a crucial laboratory consumable in the biological, pharmaceutical, food, and other industries. Made of medical-grade polypropylene (PP), cryogenic tubes can withstand low temperatures down to minus 196°C in a liquid nitrogen gas phase environment. They are available in three types: cryogenic tubes (without 2D barcode), 2D barcode cryogenic tubes and 3-code cryogenic tubes.







✓High-quality raw materials:
Top-quality and food grade resin, which complies with UPS class 6, pharmaceutical and laboratory standards, is adopted. It contains much lower concentrations of trace element extractables than glass.

✓High-Precision Technology: Equipped with high-precision injection-stretch-blow molding equipment and automated equipment for manufacturing.

✓Multiple Specifications: Multiple materials and specifications are available, including PET, PETG, HDPE that are resistant to chemical corrosion, as well as PP and PC products that are autoclavable . The packaging mode of square reagent bottles can be customized to meet any needs.SBS Format Cryogenic Tubes fits automated equipment.

✓High Quality Standards: Certified by ISO13485 and ISO 9001, with batch stability.

✓Economical and Environmentally Friendly: Some products are reusable and extremely durable, reducing the waste of disposable containers and preventing the leakage of harmful substances, making them environmentally friendly.

Complete stability and safety verification reports

Manufacturing enterprise certification		Production process, quality standards, storage, transportation and use verification		Testing by third-party authoritative professional inspection and testing organizations		
Qualification certificate	ISO 9001, ISO13485	Process test	Injection molding machine, mold performance verification	Biological testing GB/T16886.5-2017 GB/T16886.4-2003 GB/T16886.10-2017 GB/T16886.11-2021	In vitro cytotoxicity test	
	FDA, CE	Performance test	Sealing test		Skin sensitivity test	
	Irradiation ISO 13485, ISO 11137		Cryogenic test		Skin irritation test	
Sterility testing laboratory Environmental testing	ISO 7 requirements		High-temperature sterilization test		Acute systemic toxicity test	
	GB 50591-2010		DNase/RNase		Hemolysis test	
	GB/T 16294-2010		Endotoxin	Physical and chemical testing GB/T14233.1-2008	Heavy metal content of materials	Pb, Sn, Cd, Cr
Level 100000 clean workshop environmental testing	ISO 8 requirements		Bottom 2D barcode integrity test		Leachable testing	Reducing substances
	GB 50073-2013	Sterility and particle assurance	Irradiation process verification			pH
	YY0033-2000		Sterile packaging verification			Evaporation residue
Purified Water System Validation	GMP requirements		Product sterility test			UV absorbance
Raw material verification	Physical and chemical testing		Insoluble particle detection			
	Extractable testing		Drop and transportation verification			

Cryogenic Tubes



Cap Type	External thread cap				Internal thread cap			
Capacity (mL)	1.5	2.0	4.0	5.0	1.5	1.8	4.0	5.0
Overall height (mm)	40.7	45.5	76.3	93.3	40.7	45.5	76.3	93.3
Size parameters (mm)	10				8.3			
Outer diameter Φ (mm)	12.85				12.10			
Temperature Range	-196 to 121°C				-196 to 121°C			

Note:

1. The thread of the external thread cap is not directly exposed to the outside, which minimizes the possibility of cross-contamination;
2. The internal thread cap has the same diameter as the cryogenic tube, which has an advantage in intensive storage applications;
3. The maximum volume of the external thread cap is closer to the nominal volume than the internal thread cap. Since the content volume usually increases during liquid freezing, the recommended usage volume of both external and internal thread cap cryogenic tubes is 80% of the maximum volume;
4. Both storage methods are aimed at ensuring the safety of cryogenic storage and can be freely selected according to the actual user needs.



Cryogenic Tubes

Cryogenic Tubes (without 2D barcode) – Bag Package

Product Number	Capacity (mL)	Cap Type	Quantity /Bag	Bags /Box	Box /Case
618901	1.0	External thread	96	/	10
606901	1.5	External thread	50	10	4
607401	2.0	External thread	50	10	4
608401	4.0	External thread	50	5	4
609401	5.0	External thread	50	5	4
606801	1.5	Internal thread	50	10	4
607301	1.8	Internal thread	50	10	4
608301	4.0	Internal thread	50	5	4
609301	5.0	Internal thread	50	5	4

*The dimensions of the cryogenic box are detailed on page 09



Cryogenic Tubes (without 2D barcode) - Rack Package

Product Number	Capacity (mL)	Cap Type	Pack-aging	Quantity /Rack	Racks /Case
618906	1.0	External thread	8*12	96	10
606902	1.5	External thread	10*10	100	14
607402	2.0	External thread	10*10	100	12
608402	4.0	External thread	10*10	100	8
609402	5.0	External thread	10*10	100	6
606802	1.5	Internal thread	10*10	100	14
607302	1.8	Internal thread	10*10	100	12
608302	4.0	Internal thread	10*10	100	8
609302	5.0	Internal thread	10*10	100	6

*The dimensions of the cryogenic box are detailed on page 09



2D Barcode Cryogenic Tubes - Rack Package

Product Number	Capacity (mL)	Cap Type	Pack-aging	Quantity /Rack	Racks /Case
606952	1.5	External thread	10*10	100	14
607452	2.0	External thread	10*10	100	12
608452	4.0	External thread	10*10	100	8
609452	5.0	External thread	10*10	100	6
606852	1.5	Internal thread	10*10	100	14
607352	1.8	Internal thread	10*10	100	12
608352	4.0	Internal thread	10*10	100	8
609352	5.0	Internal thread	10*10	100	6
612891	2.0	External thread	6*8	48	10
614591	4.0	External thread	6*8	48	10

*The dimensions of the cryogenic box are detailed on page 09

