# 13 cryovials

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# **ICONS**

REF	Code No.		Qty in bag
	Material	<b>I</b>	Qty in box
	Volume capacity	Glass	Qty in case for glass tube
	Additive	PET	Qty in case for PET tube
(III)	Drop volume		Qty in case
	Outer dimension	STERILE R	Sterile by irradiation
	Colour	STERILE EO	Sterile by etyhlene oxide
	Specification	<b>(i</b> )	Detailed information
IIII	Temperature range		

# MATERIALS

- PE = Polyethylene
- PET = Polyethylene terephthalate
- HDPE = High Density Polyetyhlene
- LDPE = Low Density Polyethylene
- PP = Polypropylene
- PS = Polystyrene
- PVC = Polyvinyl chloride
- ABS = Acrylonitrile Butadiene Styrene

- COC = Cycloolefin copolymers
- HIPS = High impact polystyrene
- TPE = Thermoplastic Elastomer
- GPPS = General purpose polystyrene
- PC = Polycarbonate
- P.O.M. = Polyoxymethylene



#### **Cryogenic Tube**

- MINIPLAST cryogenic tube is made of medical grade polypropylene (PP) and is endotoxin-free. They are disposable laboratory consumables dedicated to storing biological samples.
- The grooved cap and the tube body are easy for screw.
- The cap is upgraded to a double-shot molding process, which is more reliable for sealing and preventing leakage than common O-ring.
- Temperature range: -196°C (gas phase of LN2) to +121°C for different application requirements.
- Multiple color options for the cap.
- According to different requirements, there are ordinary grade and PCR grade. PCR-grade is free from DNA, DNase, RNase and endotoxin. Optional E.O. or irradiation sterile.





Double-shot molding process, anti-leakage.



V bottom is conducive to centralized processing of trace samples.

**101-1801** (KJ318)











REF	Original REF.			I	J		
101-0501	KJ320-3		Ø10×47mm	0.5mL	-196~+121°C	500	5000
101-1501	KJ320-8	Cap:	Ø10×47mm	1.5mL	-196~+121°C	500	5000
101-1502	KJ320-1	PP+TPE Double-shot injection	Ø10×47mm	1.5mL	-196~+121°C	500	5000
101-2001	KJ320-9	Tube:	Ø10×47mm	2.0mL	-196~+121°C	500	5000
101-2002	KJ320-2	PP	Ø10×47mm	2.0mL	-196~+121°C	500	5000
101-2003	-	-	Ø10×50mm	2.0mL	-196~+121°C	500	5000
101-1801	KJ318	PP	Ø12×45mm	1.8mL	-80~+121°C	500	5000
101-5001	KJ317	PP	Ø16×60mm	5.0mL	-80~+121°C	200	2000

**101-2002** (KJ320-2)



#### **External Thread Cryotube**

The cryotube uses medical grade polypropylene (PP) as raw material and is a disposable laboratory consumable dedicated to storing biological samples.

- Temperature range: -196°C (gas phase of LN2) to +121°C for different application requirements.
- The external screw cap can reduce the chance of sample contamination

The tube cap is upgraded to a double-shot molding process, which is leak-proof during operation according to safety standards. Good sealing is guaranteed even at the Ultra-low temperature, ensuring the safety of samples and laboratory personnel.

The grooved design makes it easy to screw the cap. The cap is equipped with a embedded small color lid for easy identification (Multiple color options).

- The cap and the tube are made of PP raw materials with the same batch and model, so the same expansion coefficient ensures sealing.
- Barcodes and human readable codes are used for sample digital management and easy identification, and a large white area is convenient for
- marking
- The curved bottom design is convenient for centralized liquid handling and reduces residue.

According to different requirements, there are standard grade and PCR grade. PCR-grade is free from DNA, DNase, RNase and endotoxin. Irradiation sterilization is available.











----Inserted Color Top

\_\_\_ External Thread Cap

-- Fxternal Thread

--Writing Area

--- Graduation

Barcode

---Double-shot molding ring

Bar code + digital code, convenient for sample management

- Double-shot molding process, anti-leakage
- Embedded Color lid.



REF	Original REF.							$\langle \mathbf{i} \rangle$
102-1001	KJ334-6		Ø12.5×42mm	1.0mL	-196~+121°C	500	5000	Self standing
102-1801	KJ334-1		Ø12.5×47mm	1.8mL	-196~+121°C	500	5000	Round bottom
102-1802	KJ334	Cap: PP+TPE	Ø12.5×49mm	1.8mL	-196~+121°C	500	5000	Self standing
102-3501	KJ334-5	Double-shot injection	Ø12.5×75mm	3.6mL	-196~+121°C	200	2000	Round bottom
102-3502	KJ334-4	Tube: PP	Ø12.5×77mm	3.6mL	-196~+121°C	200	2000	Self standing
102-4501	KJ334-3		Ø12.5×89mm	4.5mL	-196~+121°C	200	2000	Round bottom
102-4502	KJ334-2		Ø12.5×90mm	4.5mL	-196~+121°C	200	2000	Self standing
102	KJ335-7	PP	Ø9×5mm	Universal	-196~+121°C	1000	30000	Multi colour

Warning: The cryovials are suggested to be stored only in the gas phase above the liquefied surface (i.e., in the gas state of the liquid nitrogen). Do not immerse the cryovials directly into the liquid below the liquefied surface (e.g., in the liquid nitrogen) for preservation, to prevent accidents caused by rapid expansion of the gas pressure inside the tubes.

#### **Internal Thread Cryotube**

The cryotube uses medical grade polypropylene (PP) as raw material and is a disposable laboratory consumable dedicated to storing biological samples.

- Temperature range: -196°C (gas phase of LN2) to +121°C for different application requirements.
- Tube cap upgraded to double-shot molding process. Ensure the safety of samples and laboratory personnel.

The grooved design makes it easy to screw the cap. The cap is equipped with a embedded small color lid for easy identification (Multiple color options).

The cap and the tube are made of PP raw materials with the same batch and model, so the same expansion coefficient ensures sealing. Barcodes and human readable codes are used for sample digital management and easy identification, and a large white area is convenient for marking.

The curved bottom design is convenient for centralized liquid handling and reduces residue.

According to different requirements, there are standard grade and PCR grade. PCR-grade is free from DNA, DNase, RNase and endotoxin. Irradiation sterilization is available.









Bar code + digital code, convenient for sample management

Double-shot molding process, anti-leakage.

Embedded Color lid



	original field			G	٢			
103-1001	KJ335-6		Ø12.5×40mm	1.0mL	-196~+121°C	500	5000	Self standing
103-1801	KJ335-1		Ø12.5×49mm	1.8mL	-196~+121°C	500	5000	Round bottom
103-1802	KJ335	Cap: PP+TPE	Ø12.5×50mm	1.8mL	-196~+121°C	500	5000	Self standing
103-3501	KJ335-5	Double-shot injection	Ø12.5×77mm	3.6mL	-196~+121°C	200	2000	Round bottom
103-3502	KJ335-4	Tube: PP	Ø12.5×79mm	3.6mL	-196~+121°C	200	2000	Self standing
103-4501	KJ335-3		Ø12.5×91mm	4.5mL	-196~+121°C	200	2000	Round bottom
103-4502	KJ335-2		Ø12.5×93mm	4.5mL	-196~+121°C	200	2000	Self standing

Warning: The cryovials are suggested to be stored only in the gas phase above the liquefied surface (i.e., in the gas state of the liquid nitrogen). Do not immerse the cryovials directly into the liquid below the liquefied surface (e.g., in the liquid nitrogen) for preservation, to prevent accidents caused by rapid expansion of the gas pressure inside the tubes.

---- Inserted Color Top

--- Internal Thread Cap

· Double-shot moldina rina





## Storage Box for Cryotubes



REF	Original REF.			Å		$\prod$		(i)
106-0001	KJ319-11	PC	133×133×53mm	100wells	-196~121°C	1	50	Transparent purple or blue
106-0002	KJ319-15	PC	133×133×53mm	81wells	-196~121°C	1	50	
106-0003	KJ319-16	PC	150×150×55mm	100wells	-196~121°C	1	50	
106-0004	KJ319-13	Cardboard box PP grid	130×130×50mm	100wells	-196~121°C	1	50	
106-0005	KJ319-14	Cardboard box Cardboard grid	130×130×50mm	81wells	-196~121°C	1	50	
106-0006	KJ319-8	ABS	210×100×20mm	40wells	-80~121°C	1	50	White or light blue

#### Multi-coded cryostorage vial

With the rapid development on the modern biotechnology, many biobanks are launched in the university labs, hospital sample library and research/testing center. To guarantee the safe, ordered and digitized management for the biobank, with purpose of preventing mistake by manual marking on the tubes and improving efficiency, cryovials with QR code is your most ideal choice.

• Made of pure polypropylene raw material in accordance with USP Class VI, produced in GMP Class 100,000 clean workshop. No burst, no leakage, good sealing when stored in ultra-hypothermia liquid nitrogen (-196°C).

The tube bottom is upgraded to a double-shot molding process.

Multi code integrated in one: QR code on the tube bottom + bar code on writing area + Number code. Each tube has its unique identifying information. Laser etched QR code and bar code, no fading, no peeling, good stability.

Clear black printed graduation, large white writing area on the tube, with multi-color optional cap colors.

• Hollow design for the bottom of the cryogenic box, especially used in centralized QR code scanning on the tube bottom by the bench top QR reader. The unique bar code on the box side can carry out convenient classified-querying and centralized management.

DNA/RNA free, Non-pyrogenic, no endotoxin, no cytotoxicity. Irradiation sterilization is available.



Bar code on the box.



Clear and precisely printed grid on the box lid.



Hollow design for centralized scanning by th reader.



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Laser etched QR code on the bottom.



Laser etched bar code and number code.





REF	Original REF.	E			J	$\square$	<b>I</b>		$(\mathbf{i})$
104-0501	KJ340-1	0.5mL		Ø12.3×31mm	-196~+121°C	500PCS/Bag	-	5000	STERILE R
104-0502	KJ340-3	0.5mL	Tube:PP+PP	133×133×33mm	-196~+121°C	-	100PCS/Storage box	2000	STERILE R
104-1501	KJ340-2	1.5mL	Double-shot injection	Ø12.3×47mm	-196~+121°C	500PCS/Bag	-	5000	STERILE R
104-1502	KJ340-4	1.5mL	Box:PC	133×133×51mm	-196~+121°C	-	100PCS/Storage box	2000	STERILE R

Warning: The cryovials are suggested to be stored only in the gas phase above the liquefied surface (i.e., in the gas state of the liquid nitrogen). Do not immerse the cryovials directly into the liquid below the liquefied surface (e.g., in the liquid nitrogen) for preservation, to prevent accidents caused by rapid expansion of the gas pressure inside the tubes.



#### Multi-coded cryostorage vial



#### 0.75mL(External thread) 0.5mL(Internal thread), 196wells



REF	I	MAT		J	ý		(i)
104-0751	0.75mL (External Thread)	Box: PC	Tube: Ø8.9×34mm Box:132×132×36.5mm	-196~+121°C	196	2352	The cryostorage vials are
104-0501	0.5mL (Internal Thread)	Tube body: PP+PP,Double-shot molding Tube lid: TPE+HDPE, Double-shot molding	Tube: Ø8.9×34mm Box:132×132×36.5mm	-196~+121°C	196	2352	the gas phase of liquid nitrogen.

#### SBS Standard Cryostorage Vial

**MINIPLAST** SBS standard cryovials adopt the international standard DataMatrix 2D barcode encoding rules and are designed to be compatible with the SBS standard racks that meet the ANSI/SLAS industry standards. They are suitable for use with automated equipment in biobanks and laboratories. The racks and cryovials are highly compatible, robust, easy to use, safe and reliable, with high traceability.

• Compatible with laboratory automation equipment (such as liquid workstations, automated refrigerators, etc.), the industry-standard SBS standard racks feature an 8x12 array layout. Racks are marked with multiple codes including barcodes and QR codes, ensuring traceability of the samples in the racks.

The cryovials are made of medical-grade pure polypropylene. They are manufactured using a double-shot molding process, enduring temperatures from -196°C to +121°C, and are safe for storage in liquid nitrogen gas phase, allowing multiple freeze-thaw cycles.

The caps are designed with an integrated sealing gasket to prevent leakage and ensure the seal of the tube. U-shaped bottom of the tubes facilitates the complete utilization of micro-samples.

The bottom of each tube is laser-etched with an international standard DataMatrix 2D barcode, resistant to fading and wear, solvent-resistant, clear and readable. The combination of a QR code and a numeric code on the tube body provides triple assurance for easy identification and high traceability.

Produced in a ISO Class 6 Cleanroom and sterilized by irradiation, the cryovials are free from RNase, DNase, endotoxins, and pyrogens.





96-well and 48-well SBS Standard Cryovial Boxes

QR code and barcode marking on side of the box.



Laser etching QR code on bottom of tube, barcode and digital code on tube body, realize multi-code recognition.



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Bottom of tube QR code for centralized scanning recognition by professional scanners.

External Thread







## SBS Standard Cryostorage Vial

#### External Thread, 0.75mL 1.4mL, 96wells



REF	I	<b>A</b> B	MAT	J		<b>I</b>		i
105-0501	0.75mL	External Thread	Box body: PP Box lid: PC		Tube: Ø8.9×34mm Box: 127×85×38mm	96	48	
105-1001	1.4mL	Externat milead	Tube body: PP+PP, Double-shot molding Tube lid: PP	10/ 10100	Tube: Ø8.9×52mm Box: 127×85×56.4mm	96	36	The cryostorage vials are
105-0504	0.75mL	External Thread	Box body: PP Box lid: PC	-196~+121°C	Tube: Ø8.9×34mm Box: 127×85×38mm	96	48	gas phase of liquid nitrogen.
105-1004	1.4mL	External Inredu	Tube lid: HDPE+TPE, Double-shot molding		Tube: Ø8.9×52mm Box: 127×85×56.4mm	96	36	

#### Internal Thread, 0.5mL 1.0mL, 96wells

			105-1003				105-0503	
REF	I	<b>A</b> D	MAT			ý		(i)
105-0503	0.5mL	Internal Thread	Box body: PP Box lid: PC	_196±121°C	Tube: Ø8.9×34mm Box: 127×85×38mm	96	48	The cryostorage vials are
105-1003	1.0mL	internat filleau	Tube lid: PP+TPE, Double-shot molding	-170-7121 0	Tube: Ø8.9×52mm Box: 127×85×56.4mm	96	36	the gas phase of liquid nitrogen



### SBS Standard Cryostorage Vial

#### External Thread, 1mL, 48wells



105-1005	1mL	Box body: PP Box lid: PC Tube body: PP+PP, Double-shot molding Tube lid: TPE+HDPE, Double-shot molding	External Thread	104 . 10190	Tube: Ø13×31.5mm Box: 127×85×38mm	48	48	The cryostorage vials are
105-1006	1mL	Box body: PP Box lid: PC Tube body: PP, Double-shot molding Tube lid: HDPE	Externat filleau	-170~+121 C	Tube: Ø13×20mm Box: 127×85×24.5mm	48	48	the gas phase of liquid nitrogen

#### External Thread, 2mL 5mL, 48wells

							10F - 2001	
				0			103-2001	
REF	E	<b>A</b> B				<b>I</b>		( <b>i</b> )
105-5001	5mL	External Thread	Box body: PP Box lid: PC Tube body: PP+PP. Double-shot molding	-196~+121°C	Tube: Ø13×80mm Box: 127×85×85mm	48	24	The cryostorage vials are suggested to be stored only in
105-2001	2mL		Tube lid: TPE+HDPE, Double-shot molding		Tube: Ø13×43mm Box: 127×85×50mm	48	36	the gas phase of liquid nitrogen



#### **Cluster Tubes**

• The 1.1mL 96-well cluster tube rack is in compliance with ANSI-SBS standards, suitable for use with multi-channel pipettors and automated liquid handling workstations with SBS standard-sized carriers.

- The tubes are made from highly transparent imported PP material, offering excellent chemical stability, suitable for the low-temperature storage of cells, drugs, tissues, serum, etc.
- The cluster tubes are available in single, 8-strip, and 12-strip configurations. Tube caps are available in 8-strip and 12-strip options.
- Designed with a one-way lid and an alphanumeric grid to ensure positive sample identification.
- The rack features a hollow bottom and sidewalls for good thermal conductivity and supports direct immersion in water baths with the rack.
- Resistant to low temperatures down to -80°C for storage, and withstands autoclaving at high temperature and pressure.











REF		<b></b>	J		ý		(i)
107-1011	Single	127.5×85×51mm	-80~+121°C	Box:PP Tube:TPE	96 (in box)	36 (Boxes)	
107-1012	8-Strip	127.5×85×51mm	-80~+121°C	Box:PP Tube:TPE	12 (in box)	36 (Boxes)	SBS standard
107-1013	12-Strip	127.5×85×51mm	-80~+121°C	Box:PP Tube:TPE	8 (in box)	36 (Boxes)	
107-0001	8-Strip	-	-80~+121°C	Tube:TPE	120 (in bag)	10 (bags)	
107-0002	12-Strip	-	-80~+121°C	Tube:TPE	120 (in bag)	10 (bags)	

\*The dimensions only for reference. For accurate data, consult customer service \*Customizable sterilization.