

1.4 Cryogenic tubes



- ✓ Safe long-term storage
- ✓ Perfectly sealed containers
- ✓ Highly stable

Cryopreservation is an essential process for halting almost all chemical reactions during long-term storage and for preventing sample degradation. The most commonly used approach is to store samples in the gas phase of a liquid nitrogen tank, or in freezers. BRAND offers highly stable cryogenic tubes as an ideal choice for safe, long-term storage of biological materials. The right plastic and a precise thread design help perfectly seal these containers, reducing the danger of sample contamination.



Applications

- + Storage of micro-organisms
- + Storage of primary cells
- + Storage of cell lines
- + Storage of blood and serums
- + One-handed, aseptic work
- + Sample transport

Features

- + Extremely stable
- + Available either with a silicone seal or sealing lip
- + Temperature stability to -196 °C
- + Autoclavable at 121 °C (2 bar), according DIN EN 285
- + Suitable for centrifuging with up to 14,000 x g (tubes without ring stands)
- + Easy to open by hand with just a 1^{1/4} turn

User information

Handling and safety information

- Cryogenic tubes should not be filled completely, as volumes may expand during freezing. The recommended fill volume is indicated at the upper end of the graduation.
- Cryogenic tubes with silicone sealing rings should not be opened while frozen, as this may damage the silicone seal.
- For safety reasons, BRAND recommends that cryogenic tubes be stored in the gas phase in liquid nitrogen. This reduces the danger of nitrogen penetration in case of improper use.



Advantages of external thread with sealing lip and silicone seal

- Simplifies single-handed operation in comparison to cryogenic tubes with internal thread.
- Reduces the danger of contamination.

Preparing cells for freezing

- Ensuring cell authenticity. Cells to be cryopreserved should be free of contamination and have good viability.
- Prepare cryomedium specific for the cell type, then place the cryomedium and pre-marked cryogenic tubes on ice.
- Harvest the cells, centrifuge to remove the growth media, then suspend the cell pellets in a cool cryomedium.
- Transfer the cell suspension into the cryogenic tubes and start the cooling process.



Advantages of internal thread

- Space-saving compared to cryogenic tubes with external thread.
- Colored cap inserts snap in farther. Tubes can be removed from the box using the rod (fig. below).
- Uniform exterior diameter improves fit with centrifuge rotors.

Accessories

Cryogenic tube rack

Non-slip due to rubber feet. Locking cryogenic tubes with a foot rim simplifies single-handed opening. For 50 self-standing cryotubes. Pack of 4.

Cat. No. **114860**



Ice bucket

Durable, rigid polyurethane foam with excellent insulation properties. Operating temperature -196 °C to +95 °C. Pack of 1.

Capacity [l] Cat. No.

4.5 **156100**



Storage boxes

With openings on the lid and base to prevent condensation or ice build-up. Fits into common stainless steel containers. Operating range -196 °C to +121 °C.



for cryogenic tubes [ml]	Positions	L x W x H [mm]	Pack of	Cat. No.
1.2 and 2	81	133 x 133 x 52	4	114862
3, 4 and 5*	81	133 x 133 x 95	5	114864
1.2 and 2**	100	133 x 133 x 52	4	114866

* external thread, ** internal thread

Tubes can be removed from the box using the rod

