

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 11/4 turn



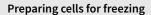




User information

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.



- 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 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.



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.

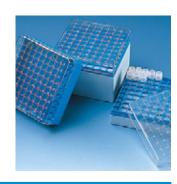
Cat. No. 114860



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

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



