

Cooling and the freezing of biological products is a complex process during which many chemical and physiological changes can occur. Biological products can be preserved in many ways, but the storage at very low temperatures is the only method of conservation that minimizes these changes.

Living cells have a critical temperature of  $-130^{\circ}$ , beyond this threshold temperature the stability of the sample can't be guaranteed.

In order to guarantee stability of the sample living cells must be stored under temperatures provided by using liquid nitrogen ( $-196^{\circ}\text{C}$ ) and we then have a safety margin of  $+60^{\circ}\text{C}$  from the critical point.

### CRYC-Series, Liquid Nitrogen Container With Racks

The Series products are designed for storing biological samples in vials, especially suitable for the fields of medical treatment and biological science and research. They feature in storing large capacity of biological samples and low liquid nitrogen consumption, which are the most economical choice.



#### Main Features:

- Unique hanging rack and guided box design, allows for easy tracking and retrieval of samples.
- Advanced vacuum insulation minimizes liquid nitrogen evaporation and reduces operating costs.
- Durable aluminium construction provides years of trouble free service.
- Compact size allows system to easily fit into any lab.
- An optional sturdy 4 wheels cart provides easy movement within the laboratory.
- Super vacuum insulation offers unbeatable liquid nitrogen efficiency.
- Level measuring scale (optional), for measuring the current level of liquid nitrogen.
- Lockable cover (optional), prevent unauthorized entry.
- Plastic box, for storing in vials.
- Narrow neck design.

Model	Unit	CRYC-47	CRYC-65	CRYC-120	CRYC-175
Capacity	L	47.0	65.0	121.0	175.0
Empty Weight	kg	19.0	27.5	43.0	54.5
Neck diameter	mm	127	216	216	216
Outer diameter	mm	500	573	573	676
Height	mm	675	710	1000	1020
Static evaporation loss mass	L/d	0.33	0.79	0.87	0.87
Static holding time (days)	d	142	82	139	202
Numbers of racks	n	7	5	5	7
Box per rack	n	5	5	10	10
Measurement of rack	mm	82x84	142x144	142x144	142x144
Measurement of box	mm	76x76	134x134	134x134	134x134
Box needed for system	n	35	25	50	70
Number of vials	n	875	2025	4050	5670