

ASTEC Container Series

The ASTEC LN2 Tank Series stands out with its advanced insulation technology, designed to deliver maximum efficiency and reliability. By adopting high performance aluminum foil with exceptional reflective properties as a multilayer insulation, the tanks dramatically reduce heat radiation. Combined with insulation materials engineered for low thermal conductivity and minimal gas emission, this unique design ensures superior temperature stability, extended LN2 retention, and long-term sample safety.







Key Features of New ASTEC LN2 Container Series

- Astec's new LN2 tank combines innovative design and user-friendliness to reliably protect your valuable samples.
- Superior insulation performance and robust construction ensure stable, long-term storage.
- Featuring a lightweight yet high-capacity design, it delivers uncompromising quality.





ASTEC LN₂ Container Series

Product introduction

- ▶ The main body is made of aluminum alloy plate, which is light in weight, high in strength and corrosion resistant.
- ► The multi-layer heat insulator uses aluminum foil with excellent reflective performance as reflective screen and uses materials with small thermal conductivity and low outgassing rate as the heat insulating material.
- ▶ The vacuum layer is in a high vacuum state, and an adsorbent with a large adsorption capacity is used to ensure the long-term stability and reliability of the container performance.
- ► The aluminum alloy liquid nitrogen container is mainly composed of an outer shell, and inner tank, a neck tube, a multi-layer insulation body, a bucket, etc.
- ► The neck tube is made of glass fiber reinforced plastic, which has the characteristics of high mechanical strength and low thermal conductivity.





- Low LN₂ consumption
- High strength, low weight aluminum construction
- Convenient and light packaging
- Large capacity





ASTEC LN₂ Container Series | Specification

*1 Evaporation rate and static hold time are values in a static state (without a canister)

Models	AR Series(Racks)				AS Series(Dewer)			
	AR-35-125-6	AR-95-216-6	AR-145-216-6	AR-175-216-6	AS-10-50	AS-20-50	AS-30-50	
Diameter (mm)	451	678	678	678	300	396	451	
Height (mm)	802	846	1040	1093	566	699	686	
Necktube Dimensions (mm)	125	216	216	216	50	50	50	
LN₂ Capacity(L)	35.5	95.0	145.0	175.0	10	20	30	
Evaporation Rate (L/Day) %1	0.36	0.81	0.85	0.87	0.12	0.12	0.124	
Static Hold Time (Days) %1	99	117	171	201	86	166	242	
Empty Weight (kg)	24.1	54	68	73	7	13	17	
Charged Weight(kg)	50	130	185	214	15	29	41	
Number of Racks	6	6	6	6	-	-	-	
Racks (WxDxH:mm)	81×85×56	139×141×56	139×141×56	139×141×56	-	-	-	
Number of Vials (1.2/2.0ml)	750	3000	4800	6000	-	-	-	

Models	AD Series (Dry Shipper)	AC Series (Canister)					
Wodels	AD-4-70-1	AC-35-90-6	AC-47-127-10	AC-47-127-6	AC-10-50-6	AC-20-50-6	
Diameter (mm)	224	451	508	508	300	396	
Height (mm)	500	754	775	775	558	690	
Necktube Dimensions (mm)	70	90	127	127	50	50	
LN₂ Capacity(L)	4	35	47	47	10	20	
Evaporation Rate (L/Day) %1	0.19	0.25	0.36	0.36	0.116	0.12	
Static Hold Time (Days) ※1	9	140	131	131	86	168	
Empty Weight (kg)	6.5	20	24	23	7	13	
Charged Weight(kg)	9.7	48	62	61	15	29	
Number of Barrel	1	-	-	-	-	-	
Number of Canisters	-	6	10	6	6	6	
Canister (φD x H:mm)	67×276	70×276	72×276	97×276	38×120	38×276	
Number of Straws (0.5cc)	664	4728	7800	9360	792	1200	
Number of Vials (1.2/2.0ml)	84	720	1200	1332	90	180	



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