



MVE SC 4/2V & 4/3V

Next Generation Vapor Shipper

MVE has redesigned its popular 4L vapor shippers—the SC 4/2V and SC 4/3V—to enhance performance and reliability. These vapor shippers are the industry standard for efficiency and durability, now fitted with our patented BEND DON'T BREAK™ technology. The newly designed top head shape deforms under excessive G-force loads, allowing the dewar to absorb impact forces more effectively, reducing the risk of structural failure and minimizing damage from mishandling during transport. Additionally, MVE's patent-pending Vapor Shield Technology minimizes the risk of vacuum degradation resulting from LN₂ overfill. These innovative improvements ensure greater reliability and improved vacuum integrity, continuing to make MVE dewars the industry standard for valuable sample shipments.



Key Product Features

- Enhanced Inner Construction:** Improvement over current design to withstand the physical stress of shipping and handling.
- Durable Neck Ring Design:** Increased structural integrity to avoid breakage during transport.
- Integrated Locking Tab:** Avoids welded tab breaks for added security.
- Improved Hold Times:** Significantly improved hold times - between 19 to 26 days - to mitigate shipment delay risk.
 - SC 4/2V: Increased from **13 days** to **19 days**
 - SC 4/3V: Increased from **21 days** to **26 days**
- Vapor Shield Technology:** Minimizes the risk of vacuum degradation resulting from LN₂ overfill.

Applications

- Secure transportation of biological samples for research and healthcare industries
- Cold chain logistics for IVF, pharmaceutical, life science and animal husbandry sectors

Specifications

SC 4/2V	SC 4/3V
Capacity (L) 4.1	Capacity (L) 4.5
Static Hold Time (days) 19	Static Hold Time (days) 26
Weight (Empty) 12.4 lbs	Weight (Empty) 12.5 lbs
Weight (Full) 23.3 lbs	Weight (Full) 23.2 lbs

Contact Info

MVE Biological Solutions
 www.mvebio.com
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Technical Specifications

	SC 4/2V	SC 4/3V
Maximum Storage Capacity		
○ No. of Canisters	1	1
○ No. of 1/2 cc Straws 10/cane	280	120
○ No. of 1/2 cc Straws 1 Level Bulk	440	210
○ No. of 1/4 cc Straws 1 Level Bulk	938	452
○ No. of 1.2 & 2.0 ml Vials 5/cane	95	40
○ No. of 1.2 & 2.0 ml Vials 6/cane	102	48
Performance (Hold Time overrides NER specifications)		
○ LN ₂ Capacity L	4.1	4.5
○ Static Holding Time Days	19	26
○ Static Evaporation Rate* L/day	0.23	0.19
Unit Dimensions		
○ Neck Opening in. (mm)	2.75 (70.0)	2.00 (51.0)
○ Overall Height in. (mm)	19.6 (498)	19.6 (498)
○ Outer Diameter in. (mm)	8.94 (227)	8.94 (227)
○ Canister Height in. (mm)	11.0 (279)	11.0 (279)
○ Canister Diameter in. (mm)	2.62 (67)	1.81 (46)
○ Weight Empty lb. (kg)**	12.4 (5.6)	12.5 (5.7)
○ Weight Charged lb. (kg)**	19.7 (8.9)	20.5 (9.3)
○ Weight Full lb. (kg)**	23.3 (10.6)	23.2 (10.5)
○ Protective Shipping Container Part No.	20750409	20750409

THREE Year Vacuum Warranty • TWO Year Parts Warranty

*Static evaporation rate and static holding time are nominal. Actual rate and holding time will be affected by the nature of container use, atmospheric conditions, and manufacturing tolerances.

**Weight +/-5% typical

Accessories

○ Protective Shipping Container

MVE Biological Solutions' Protective Shipping Containers for the 4/2V and 4/3V models are designed to ensure safe and secure transport of biological samples at cryogenic temperatures. These containers feature enhanced padding, anti-tipping design, and a locking mechanism to maintain upright and secure transit.



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CE 0459

Intended Use & Indication for Use for Cryogenic Storage and/or Transport

LIFE SCIENCE INTENDED USE STATEMENT

STORAGE AND TRANSPORT

MVE Dewars and Vapor Shippers are intended for the indication of preserving human biological products, samples, and/or specimens (e.g., blood, blood products, cells, tissues, etc.) at cryogenic and ultracold temperatures during storage and/or transportation.

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