

# MVE Vapor Shippers

MVE Vapor Shipper containers are designed for the safe transportation of biological samples at cryogenic (-150°C or colder) temperatures. Fabricated from durable, lightweight aluminum, they employ a hydro-phobic absorbent that contains the liquid nitrogen for "spill free" shipping. The absorbent also repels moisture and humidity, assuring the maximum holding time. This eliminates the necessity to dry units between uses.

A protective shipping carton is available for all models (except the SC 20/12V) **which protects the container from being placed on its side and helps in withstanding the rigors of transportation.** These containers may be used to ship your samples with a "non-hazardous" classification throughout the world, thus reducing costs and helping to assure sample viability.



MVE's IATA Dewar has been independently tested and approved with the accessories listed below to meet current IATA regulations concerning the transportation of potentially infectious substances. Test Data and Reports available per request. Please contact MVE or your Authorized Distributor.

#### Accessories:

- 1 ml vials • 2 ml vials • 3 ml vials • 4 ml vials • IATA Absorbent Cloth

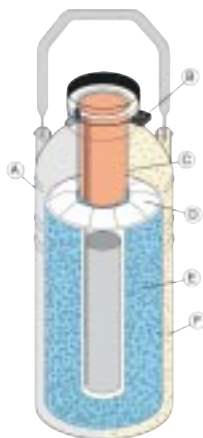


The unique cryo-block inserts enable the user to optimize hold time and capacity. Available in three sizes 1, 1.5, and 2 inches, each pair of blocks provides a specific hold time between 2 and 8 days.



# MVE Vapor Shippers

Model	SC 2/1V	SC 4/2V	SC 4/3V	SC 20/12V	XC 20/3V*	Mini Moover	Cryo Moover	Cryo Shipper	Cryo Shipper XC
<b>Max. Storage Capacity</b>									
Number of canisters	1	1	1	6	4 + 1 Center	1	7	1 Rack	-
No. of 1/2 cc straws (10/cane)	-	280	120	540	2,500/2,000*	60	3080	-	-
<b>No. of 1/2 cc straws (1 Level Bulk)</b>	<b>88</b>	<b>440</b>	<b>210</b>	<b>780</b>	<b>3,750/3,000*</b>	<b>88</b>	<b>4354</b>	-	-
No. of 1/4 cc straw (1 Level Bulk)	182	938	452	6,750/6,000*	182	8904	-	-	-
No. of 1.2 & 2.0 ml vials (5/cane)	-	95	40	150	750/600*	20	945	-	-
No. of 1.2 & 2.0 ml vials (6/cane)	9	106	48	180	900/720*	24	1134	500	966 (Bulk)
Number of blood bags stored (4R9953)	-	-	-	-	-	-	-	10	10
<b>Performance</b>									
Liquid nitrogen capacity (liters)	1.5	3.6	4.3	12.3	6.8	2.9	4.2	8.5	10
Static evaporation rate (liters/day)	0.19	0.26	0.20	0.09	0.3	0.20	0.35	0.85	.7
<b>Static holding time (days)</b>	<b>8</b>	<b>14</b>	<b>21</b>	<b>85</b>	<b>23</b>	<b>14</b>	<b>12</b>	<b>10</b>	<b>14</b>
<b>Unit Dimensions</b>									
Neck opening in (mm)	1.4 (35)	2.75 (70)	2 (51)	2 (51)	3.81 (96.7)	1.4 (35)	3.8 (97)	8.5 (216)	8.5 (216)
Overall height in (mm)	13.5 (343)	18.4 (468)	19.4 (492)	25.7 (652)	25 (635)	19.5 (495)	22 (558)	21.5 (546)	23 (584)
Outside diameter in (mm)	7.25 (184)	8.7 (222)	8.7 (222)	14.5 (368)	14.50(368)	7.2 (184)	18.3 (464)	14.5 (369)	15 (381)
Canister height in (mm)	5 (127)	11 (278)	11 (278)	11 (279)	11(278)	11 (278)	11 (278)	-	12.5 (317.5)**
Canister diameter in (mm)	1.2 (31)	2.62 (67)	1.81 (46)	1.5 (38)	3.2 (80)	1.2 (31)	3.1 (79)	-	-
Weight empty lbs (kg)	6 (2.7)	11 (5)	13 (5.9)	30 (13.6)	23(10.5)	8 (3.6)	30.5 (13.8)	24 (10.9)	30 (13.6)
<b>Weight charged lbs (kg)</b>	<b>8.8 (4)</b>	<b>18 (8.1)</b>	<b>20 (9.3)</b>	<b>52 (23.6)</b>	<b>35(16)</b>	<b>11.6 (5)</b>	<b>38 (17.2)</b>	<b>37.5 (17)</b>	<b>47 (21.4)</b>



- A Lightweight aluminum design reduces shipping costs
- B All models come with locking tab for shipments
- C Neck Tube— High strength neck tube reduces liquid nitrogen loss
- D Advanced Chemical Vacuum Retention System provides superior vacuum performance
- E Superior hydrophobic absorbent— easy to decontaminate - repels moisture and humidity while maintaining a -150°C chamber environment
- F Insulation — MVE's advanced insulation system provides maximum thermal performance

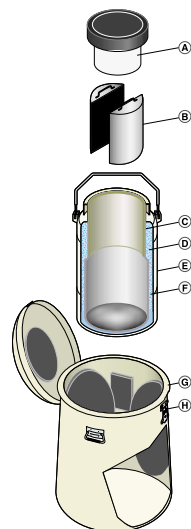
**Three Year Vacuum Warranty**



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## Cryo-Shipper Extra Capacity W/IATA      Cryo-Shipper Mini

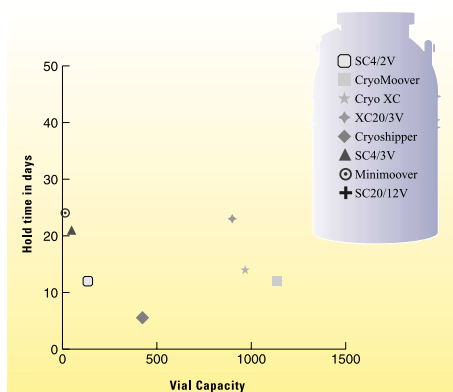
Number of Secondary Containers	1	
Number of 1 ml vials	450 (5 level bulk)	
Number of 2 ml vials	350 (4 level bulk)	
Number of 3 ml vials	250 (3 level bulk)	
Number of 4 ml vials	250 (3 level bulk)	
Number of blood bags stored (4R9951)	22	
<b>Performance</b>		
Liquid Nitrogen capacity (liters)	11.8	5.9
Static Evaporation Rate (liters/day)	0.80	0.84
Static Holding Time (days)	14	7
<b>UNIT DIMENSIONS</b>		
Neck Opening (in/mm)	8.5 (216)	8.5
Overall Height (in/mm)	24 (610)	20
Outside Diameter (in/mm)	15 (381)	11.63
Weight Empty (lbs/Kg)	29 (131)	16.5
Weight Full (lbs/Kg)	50.5 (22.9)	34.25
Maximum Working Cavity Dimensions	8-1/2" dia * 8-3/4" deep	
IATA Secondary Container Dimensions	7-3/8" dia * 8-3/4" deep	
Cryo-Shipper Mini Cavity Size	8.5 x 2 x 10	
Cryo-Shipper Mini Plastic Shipping Container Weight	10.91	
Cryo-Shipper Mini Plastic Shipping Container Dimensions	14" d x 24"h	



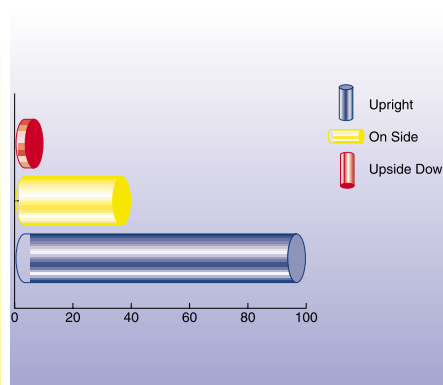
- A Easy maintenance lid design
- B Superior hydrophobic absorbent insert repels moisture and humidity while maintaining -150°C chamber environment
- C High strength neck tube reduces liquid nitrogen loss
- D Advanced Chemical Vacuum Retention System provides superior vacuum performance for the life of the product
- E Lightweight aluminum design reduces shipping costs
- F MVE's advanced insulation system provides maximum thermal performance
- G Durable plastic shipping carton resists tip-over and transport damage
- H All models come with locking tab for shipping

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### Capacities and Hold Times



### Percentage of Hold Time vs Shipping Position



**For all LN<sub>2</sub> dry shippers, maintenance of an upright position during transit is vital.** MVE offers a unique shipping carton, designed not only to protect the shipper in transit, but also to help ensure the system remains upright at all times.

**MVE** Bio-Medical Division, Chart Industries, Inc.

3505 County Road 42 West, Burnsville, MN 55306-3803 U.S.A.

Phone: 952-882-5000 . 888-683-2796 Local Fax: 952-882-5172 . [www.chartbiomed.com](http://www.chartbiomed.com)

