

TEMPERATURE ASSURANCE PACKAGING

...because every degree matters™



Which shipper is right for my temperature-sensitive product?

START HERE →

Does your product need to remain frozen, refrigerated, or at controlled room temperature?

YES

NO

Is your product a diagnostic, such as blood, tissue, or specimen?



Diagnostic & Infectious Shippers
Pages 6-10

YES

NO



Medical Transporters
Pages 33-34

Envoy Diagnostic
Page 17

How long does your shipment need to remain in transit?

1 - 2 DAYS
24 - 48 HOURS

≥ 2 DAYS
≥ 48 HOURS

≥ 3 DAYS
≥ 72 HOURS

EPS Insulated Shippers
Pages 20-21



PUR Insulated Shippers
Pages 22-23



VIP Insulated Shippers
Page 24



Ready-Engineered Insulated Shipping Systems
Pages 28-31

NEED CUSTOM DESIGN OR TESTING SERVICES?

See page 35 to learn about services available from ISC Labs.

Don't forget to **CHOOSE THE RIGHT REFRIGERANT** for your product's temperature needs. See page 19 for a guide.

Table of Contents

Storage/Transport Chest	4
Infectious Shipper	6
Diagnostic Shipper	8
Lab Mailer	11
Lab Ware.....	15
Packaging Material	16
Envoy® Diagnostic Shipper.....	17

HELP GUIDES:

Sizing your Insulated Shipper	18
Selecting the Right Refrigerant	19

Insulated Shipper EPS	20
Insulated Shipper PUR.....	22
Insulated Shipper VIP	24
PolarPack® Gel Packs.....	25
PolarPack® Foam Bricks	
MoistureGuard Gel Packs	
Rigid Bottles	
U-tek® Gel Packs, Mats and Singles	26
PureTemp™ Phase Change Materials	27
Ready-Engineered Insulated Shipping Systems	28
Envoy® Insulated Shipper.....	29
Certis® Qualified Shipper	30
GREENBOX®	31
Pallet Shippers.....	32
Medical Transporter	33
ISC Labs®.....	35



ThermoSafe®

Storage/TransportChest

ThermoSafe Storage and Transport Chests provide mobile, non-electrical low temperature maintenance for a wide variety of laboratory and field applications. Ideal for demanding cryogenic and laboratory testing as well as for the transport and storage of temperature sensitive specimens. Mid-size, portable chests hold dry or wet ice in the lab, or can transport temperature sensitive specimens in the field.

Portable Transport Chest 1167639

Portable, heavy-duty chest, featuring rugged polyethylene interior and exterior casing, and a super-efficient, non-deteriorating urethane foam insulation. Chest features rounded interior corners for easy clean-up.



Lightweight Fiberboard Chests 1167618

Lightweight, economy chests with a 275 lb [125 kg] bursting test laminated fiberboard exterior, and EPS foam interior with tight fitting plug lid. See table for additional models 1167617 and 1167612.

* Shown with optional dolly



Rugged Polyethylene Chests 1167620

Heavy-duty chests feature rugged polyethylene interior and exterior casing, and super-efficient non-deteriorating urethane foam insulation. Interior corners are rounded for easy clean-up. See table for additional models: 035252, 1167611, and 22024802.

* Shown with optional dolly



Rugged Dry Ice Chest 03600168

Compact, yet tough. Holds over 200 lb [91 kg] of pellets or cut dry ice. Available for use as a storage unit or with wheels for easy mobility.



Model	Volume [ft ³]	Dry Ice Capacity~ [lbs]	Average Holding Time ⁺	Wall Thickness In.	Dimensions L x W x H		Empty Weight [lbs]	Hardware	Optional Handling Accessories
					Inner [in.]	Outer [in.]			
Polyethylene casing with urethane foam insulation R-value: 1.1 Km ² /W [6.2 per in.]									
1167639	1.5	85	6 days	2	15 ¹ / ₈ x 13 ³ / ₄ x 12 ⁵ / ₈	19 ⁷ / ₈ x 18 ⁵ / ₈ x 16 ⁵ / ₈	27	Lid hinge with stay; 2 latches; 2 spring loaded handles	N/A
22024802	2.7	150	7 days	2 ¹ / ₄	17 x 16 ¹ / ₂ x 16 ³ / ₈	23 ³ / ₈ x 22 ¹ / ₈ x 21 ¹ / ₄	34	Lid hinge with stay and 2 latches	Dolly: 1167624
1167611	2.7	150	7 days	2 ¹ / ₄	17 x 16 ¹ / ₂ x 16 ³ / ₈	23 ³ / ₈ x 22 ¹ / ₈ x 21 ¹ / ₄	35	Lid hinge with stay; 2 latches; 2 spring loaded handles	
1167620	3.75	200	12 days	2	22 ⁻¹³ / ₁₆ x 13 ¹ / ₂ x 21	28 ¹ / ₈ x 19 ¹ / ₈ x 25 ¹ / ₄	39	Lid hinge with stay and 2 latches	Dolly: 1167622
035252	3.75	200	12 days	2	22 ⁻¹³ / ₁₆ x 13 ¹ / ₂ x 21	28 ¹ / ₈ x 19 ¹ / ₈ x 25 ¹ / ₄	40	Lid hinge with stay; 2 latches; 2 spring loaded handles	
03600168	4.0	200	12 days	2	22 x 12 x 26	26 x 16 x 33	47	Hinged lid, latch, molded in handles	Polyurethane wheels available
Laminated fiberboard with EPS insulation R-value: 0.74 Km ² /W [4.2 in.]									
1167612	2.0	120	11 days	2	17 x 16 ¹ / ₂ x 12 ⁵ / ₈	21 x 21 x 16 ³ / ₈	8	N/A	Dolly 1167624
1167617	2.5	130	11.5 days	2	16 ³ / ₄ x 16 ³ / ₄ x 15 ³ / ₄	21 x 21 x 19 ³ / ₄	9	N/A	
1167618	4.3	270	18 days	2 ¹ / ₂	23 ³ / ₈ x 14 ¹ / ₈ x 23	27 ⁷ / ₈ x 19 x 28	14.5	N/A	Dolly

~ Weight calculated using pelletized dry ice. + Average time before full sublimation.

ThermoSafe chests are strong, durable, and specifically manufactured to be used and reused. Replacement latches, hinges, handles, and other handling accessories are available and we also offer accessory replacements at a low cost. Contact your Fisher Account Manager for more information.

ThermoSafe®

InfectiousShipper

Meets U.S. Department of Transportation (DOT) and IATA requirements for transporting infectious substances (UN 2814 and UN 2900).

4 models– accommodate shipments from 4 to 6 tubes/vials.

Pre-assembled packaging includes everything needed for shipping infectious agents in accordance with DOT Regulation 49 CFR Parts 171 to 178 and IATA Packing Instructions 602.

Model	Vessel/ Dimensions [in.]	Internal Cushioning	Capacity	Outer Dimensions L x W x H [In.]	Supplied Labeling	Additional Features
0352832	Aluminum can 3 x 6	Foam insert	Four 16 x 100 mm tubes	5½ x 5½ x 11¼	Infectious substance	Includes 4 x 10 ml blood collection tubes
03600147		Absorbent material, flexible pressure vessel & bubble wrap material	Six 16 x 100 mm tubes maximum volume 60 ml	5½ x 5½ x 11¼	Infectious substance	Flexible pressure vessel accepts various sized tubes
1167597	N/A	EPS Insulated Shipper	Overpack for Models 0352832 & 03600147	14 x 14 x 14⅝	Infectious substance & miscellaneous dangerous goods	Foam insert holds up to 11.3 kg [25 lb] of dry ice in place
03600148	0.5 liter transparent container	Compartmentalized bubble pouch	Six tubes	4 x 4 x 6¾	Infectious substance & diagnostic	Liquid-tight container withstands up to 95kPa pressure
03600149	1.0 liter transparent container	Compartmentalized bubble pouch	Up to 50 ml	6¼ x 6¼ x 7½	Infectious substance	Liquid-tight container withstands up to 95kPa pressure; vessel is autoclavable for re-use



Note: Compliance with UN/DOT regulations governing shipments of infectious substances in these approved shippers is contingent on the use of all supplied components. The Shipper is ultimately responsible for determining the suitability of packaging for use with contents. Consult appropriate regulations.



Dry Ice Overpack 1167597

Substance Shippers protect frozen samples for over four days. The EPS foam container and lid accommodate either Model 0352832 or Model 1167597 shipper, plus 25 lb [11 kg] of dry ice. Foam insert holds in place while dry ice sublimates. Includes one Class 6 Infectious Substance label and one Class 9 Miscellaneous Dangerous Goods label (for dry ice), and shipping carton.



Infectious Shipper 0352832

ThermoSafe shippers include EPS foam container, flexible foam insert, clear plastic press-lock bag, secondary packaging and absorbent material for full capacity of blood, corrugated carton, and step-by-step packing instructions.



Infectious Shipper 03600149

Infectious shippers include pressure vessel with stop-lock lid, compartmentalized bubble pouch, 50 ml absorbent sheet, corrugated outer carton with required markings, shipper's declarations, and easy-to-follow instructions.

ThermoSafe®

DiagnosticShipper

Diagnostic Specimen Mailing Systems

These ready-to-use combination packaging kits have been tested and certified for the transport of diagnostic specimens as defined by the applicable regulations, in conformance with IATA Packing Instruction 650, U.S. Postal Service and DOT regulations [UN3373].

- Foam shippers and packaging accessories also are available separately for use with customer-furnished primary receptacles.

Model	Holds	Includes	Outer Dimensions L x W x H [in.]	Replacement Parts Foam Mailers Only	Accessory Pack
03527D	3 x 10 ml tubes	10 ml tubes, EPS mailer and lid, absorbent material, waterproof tape, corrugated shipping carton, press lock poly bag, UN3373 label and instruction sheet	5 5/8 x 4 x 2	Model 0352826 EPS mailer— 3 tube specimen mailer, foam only	Model 0352825 Accessory Pack
03527C	8 x 10 ml tubes	10 ml tubes, EPS mailer and lid, absorbent material, waterproof tape, corrugated shipping carton, press lock poly bag, UN3373 label and instruction sheet	10 1/2 x 5 5/8 x 3	Model 03527B EPS mailer— 8 tube specimen mailer, foam only	Model 03527E Accessory Pack



03527D



03527C



Flexible Mailers (w/out tubes)

Complies fully with U.S. Postal Service, DOT and IATA regulations for transport of clinical and diagnostic specimens (UN 3373). Includes all required secondary and outer packaging components.

Accommodates up to 16- 10 ml plastic specimen tubes.

Max capacity is 300 ml.

Model	Corrugated Carton I.D.	Includes	Absorbent Sheets	Bubble Wrap 6" X 24"	UN3373 Label
0352556	9½" x 4" x 4"	1 Plastic envelope – printed with international biohazard symbol 6" x 9 ⅜" /95 kPa (14 psi)	2 – 7½" x 4 ⅝" 240 ml capacity	1	1
0352557	11" x 8" x 4¼"	2 Plastic envelopes– printed with international biohazard symbol 7" x 12" /95 kPa (14 psi)	4 – 7½" x 4 ⅝" 600 ml capacity	2	1
0353160*	N/A	95 kPa Plastic Bag	4 – 7½" x 4 ⅝"	25/Case	N/A
0352830	7" x 4¼" x 3⅝"	90 ml Specimen Bottle, Screw Top Cap Temperature Indication Label - 1¾" x 3" Press-Lock Plastic Bag - 5⅞" x 9⅝" Security Seal - 7" x 1"	1 – 4" x 2¾"	N/A	N/A

* Accessory Kit for models 0352556 and 0352557. All models include 1 instruction sheet.

Drug Test Kit

All-in-one, easy to use drug test mailing system that meets postal and courier service regulations for non-hazardous clinical specimens.

EPS Foam, Model 0352831 (see page 20)



TO ORDER, CALL US AT 1-800-766-7000

ThermoSafe®

DiagnosticShipper

5-BAY Specimen Transport Bag

5-bay 95 kPa specimen transport bag includes absorbent material in each pocket, enough to absorb 15ml of urine or 10 ml of blood.

This multi-layer polyethylene 95 kPa bag is IATA certified, marked with biohazard symbol and detailed closing procedures.

Model	Dimensions [in.]		Case Pack
	Inner	Outer	
03531108	8 ³ / ₈ x 1 ¹ / ₂ (each pocket)	9 x 9 ³ / ₈	500



95 kPa Bags

Specimen transport bags are liquid tight and tamper evident.

The patented adhesive closure and continuous seal meet or exceed standards of all major air carriers and DOT.

Polyethylene construction and adhesive closure provides added security during handling by personnel.

Model	Inside Dimensions [in.]
0353158	6 x 9 ³ / ₈
0353159	9 x 12
03600170	11 ³ / ₈ x 16 ⁵ / ₈
03531107	13 ³ / ₄ x 17 ⁷ / ₈
03600146	10 ¹ / ₄ x 14



ThermoSafe®

LabMailer

Vial Shippers

This unique array of shipping systems protects frozen and refrigerated shipping vials. These ready-to-use kits include everything to keep sensitive goods in top condition. Just load your product, add a U-tek® phase change material pack, and close the shipper.

- Shippers (Models 0352811 and 1167547) also include U-tek and reusable polyethylene platform
- This series of Shippers (Models 1167627A and 1167626A) also include flexible polyurethane foam cushion



Model	Holds	Includes	Dimensions	
			Inner L x W x H [in.]	Outer L x W x H [in.]
0352811	(12) 28 ml vials	EPS container and lid, 24 oz [680 g] U-tek phase change material, reusable polyethylene platform and corrugated shipping carton	8 x 6 x 7	11 x 9 x 10
1167547	(48) 28 ml vials	EPS container and lid, 24 oz [680 g] U-tek phase change material, reusable polyethylene platform and corrugated shipping carton	12 x 10 ¼ x 5 ½	14 ⅞ x 13 ¼ x 8 ¼
1167627A	(24) 16–20 ml vials	EPS container and lid, corrugated shipping carton and 24-hole flexible foam insert	8 x 6 x 7	11 x 9 x 10
1167626A	(48) 16–20 ml vials	EPS container and lid, corrugated shipping carton and 24-hole flexible foam insert	12 x 10 ¼ x 5 ½	14 ⅞ x 13 ¼ x 8 ¼

ThermoSafe®

LabMailer



Model	Holds	Cavity Dimensions [in.]	Outside Dimensions L x W x H [in.]	Recommended Mailing Sleeve
03529	Cans, screw-cap vials, tubes, swabs, air filter cartridges	8 x 2¼ x 1½	9½ x 3 x 2¾	03529A
035295A	Specimen tubes, vials, swabs	5⅞ x 1½ x 1½	7 x 2½ x 2½	035295B
0352534B	Tubes, vials, cans, bottles. Can be used with Poly-Pad foam cushion to keep containers from shifting	4 x 3½ x 3¼	5¼ x 4⅜ x 4⅜	0352523B
03600166	1 or 2 standard petri dishes	4 x 1½ x 4	5¼ x 5 x 2½	N/A
035202	10 standard petri dishes	6¼ x 3¾ x 4	7½ x 4⅞ x 5	035204
0352831	Bottles, cans, vials, cups. Can be fitted with foam insert to hold small kit components	6 x 3 x 2½	7 x 4 x 3½	035256
03525B	100ml sample containers, 4 oz [113 g] urine cup	3¾ x 2¼ x 1½	4¾ x 3¾ x 3¼	03525C
0352810	Vials, tubes, small bottles, tissue flasks with growth area of 75 cm ² . Can be used with Model 035206 (flexible foam pad)	5⅞ x 4⅜ x 3	8 x 6½ x 5⅞	0352814, 035207
0352531	2 oz [57 g] bottle or Model 0352012 (aluminum can)	3¼ x 2 dia.	4⅜ x 3¼ x 3¼	03600167
03531	Tubes, vials, ampules	4¼ x 6¾ dia.	10 x 10 x 7½	Corrugated carton included



Model	Holds Tube/Slide Specifications				Outside Dimensions L x W x H [in.]	Tube Cavity Dimensions [mm]	Recommended Mailing Sleeve
	Tubes	Slides	Tube Vol. [ml]	Tube Dimensions [mm]			
03527	1	N/A	3, 5, 7, 10	Dia.: 10.25 to 16 Length: 75 to 103	5¾ x 2¼ x 2	110 x 16	03527A
0352522A	2	2	5, 7, 10	Dia.: 10.25 to 16 Length: 75 to 103	5½ x 3½ x 1¾	107 x 16	0352523A
03528	3	N/A	3, 5, 7, 10	Dia.: 10.25 to 16 Length: 75 to 103	5½ x 4½ x 1¼	105 x 17	03528A
03600165	4	8	7, 10	Dia.: 16 Length: 75 to 100	6¾ x 5½ x 1¾	110 x 19	0352535
0353120	5	N/A	3, 5	Dia.: 10.25 to 13 Length: 75 to 103	5½ x 4½ x 1½	105 x 13	03528A, 0353125
0353035	5	N/A	7, 10, 15, 25	Dia.: 16 Length: 75 to 150	7⅞ x 5¼ x 1½	170 x 16	0353040
035305	8	8	5, 7, 10	Dia.: 10.25 to 16 Length: 75 to 103	10 x 5½ x 1¾	113 x 18	0353010
03526	N/A	10	N/A	N/A	4 x 2½ x 2	N/A	03526A



Aluminum Cans

Accommodate most widely used laboratory collection tubes, vials, and bottles. Help prevent breakage during handling and shipment. Seamless construction with lined screw-caps to prevent leakage. Completely autoclavable. EPS foam mailers and mailing sleeves available.

Model	Dimensions [in.]		Recommended EPS Mailer
	Can	Outer [L x W x H]	
0352012	1¾ dia. x 4¾	2 dia. x 4⅞	03525
0353048	2½ dia. x 6	2⅝ dia. x 6	0353161



ThermoSafe®

LabMailer

Maximum breakage protection for known non-hazardous blood, serum, tissue, and other specimens. Accommodates VacuTainer®, Microtainer®, and other collection/transport tubes.*

Available in multi-tube, slide, and tube/slide combinations. Lightweight, reusable and recyclable.

*Trademarks of Becton Dickinson

Mailing Sleeves 0353125 & 0353010

Sturdy 18-point white paperboard sleeves increase the cost-effectiveness of foam mailers. Reverse tuck closures enable foam mailers to withstand multiple trips.

Sleeves 0353125 & 0353010 are printed.



Mini Mailers — for temperature-sensitive shipments

- Compact protection for temperature-sensitive shipments, ideal for serums, tissues, and reagents
- Accommodate tubes, vials, ampules, small bottles, and tissue flasks with space for refrigerants
- Insulating, thick-wall polystyrene foam construction
- Walls on Model 0352810 are 1 in. [25 mm] thick
- Maximum breakage protection for non-hazardous laboratory specimens. Ideal for biological, environmental, research & development, public health, industrial hygiene, and veterinary use
- Accommodate tubes, vials, bottles, petri dishes, and cans
- Lightweight polystyrene foam construction saves postage
- Reusable and recyclable
- Standard mailing sleeves available

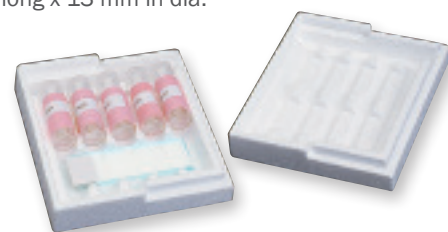
Model	Fits Foam Mailer	L x W x H [in.]	Sleeves/Case
03527A	03527	6 x 2 ³ / ₈ x 2 ¹ / ₈	300
0352523A	0352522A	5 ⁵ / ₈ x 3 ¹ / ₂ x 1 ⁷ / ₈	300
0353125, 03528A	03528, 0353120, 03600164	5 ³ / ₈ x 4 ⁵ / ₈ x 1 ⁵ / ₈	300
0352535	03600165	6 ⁵ / ₈ x 5 ⁵ / ₈ x 1 ⁷ / ₈	200
0353040	0353035	8 ¹ / ₈ x 4 ³ / ₄ x 1 ⁵ / ₈	200
0353010	035305	10 ¹ / ₄ x 8 ³ / ₄ x 1 ⁷ / ₈	200
03526A	03526	4 x 2 ⁵ / ₈ x 2 ¹ / ₄	300

See pages 12-13 for information about Foam Mailers.

Histopathology Mailer 03600164

This versatile combination mailer carries 10 vials, 2 slide packets, or 5 vials, and 1 slide packet. Cavities measure 105 mm long x 13 mm in dia.

Suitable for use with Model 03528A mailing sleeve.



Model 0352815 Economy Pack

Includes:

- 24 – Model 0352810 Mini Mailers
- 36 – Model 0353047 U-tek refrigerant packs -23 °C (-10 °F)

Model 035289 Economy Pack

Includes:

- 24 – Model 0352810 Mini Mailers
- 36 – Model 035286 U-tek refrigerant packs -1 °C (+30 °F)

ThermoSafe®

LabWare

ThermoSafe® lab ware shippers are versatile insulated shippers that aid temperature-sensitive enzymes and reagents at workstations. Durable components are designed for convenience while in transit or in-use. These shippers are lightweight & easy to handle.



Low-Temp Chiller 03001211

Economical cold trap or alcohol/dry ice bath. Convenient shallow depth has 1½ in. [38 mm] insulating walls.

Holds; wet or dry ice, alcohol

Measures:

ID – 19¾ x 11¼ x 3⅞ in. [564 x 286 x 98 mm]

OD – 22⅝ x 14⅞ x 7¼ in. [575 x 378 x 184 mm]

Labtop Cooler 0352823

Protects temperature sensitive enzymes and reagents. Maintains product between -18°C and -16°C (0°F and 2°F) for up to 10 hours. Includes two sets of cold cells -U-tek® phase change materials packs.

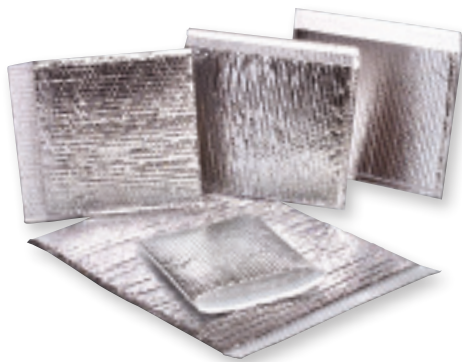
Holds: 15 x 0.5 ml and 15 x 1.5 ml tubes

Measures:

9 x 6½ x 6 in. [229 x 165 x 152 mm]



ThermoSafe® PackagingMaterial



Metallized Bubble Pouch with Self Sealing Lip and Tape

Lightweight and easy to use. Saves inventory space. Constructed of 3/16 in. [9 mm] metallized bubble with 2 in. [51 mm] lip and tape.

Model	Dimensions [in.]	Case Pack
03600154	8 x 11	350
03600155	12 x 11	250
03600156	12 x 17	200
03600158	12 x 23	150
03600159	18 x 23	100



Absorbent Sheets

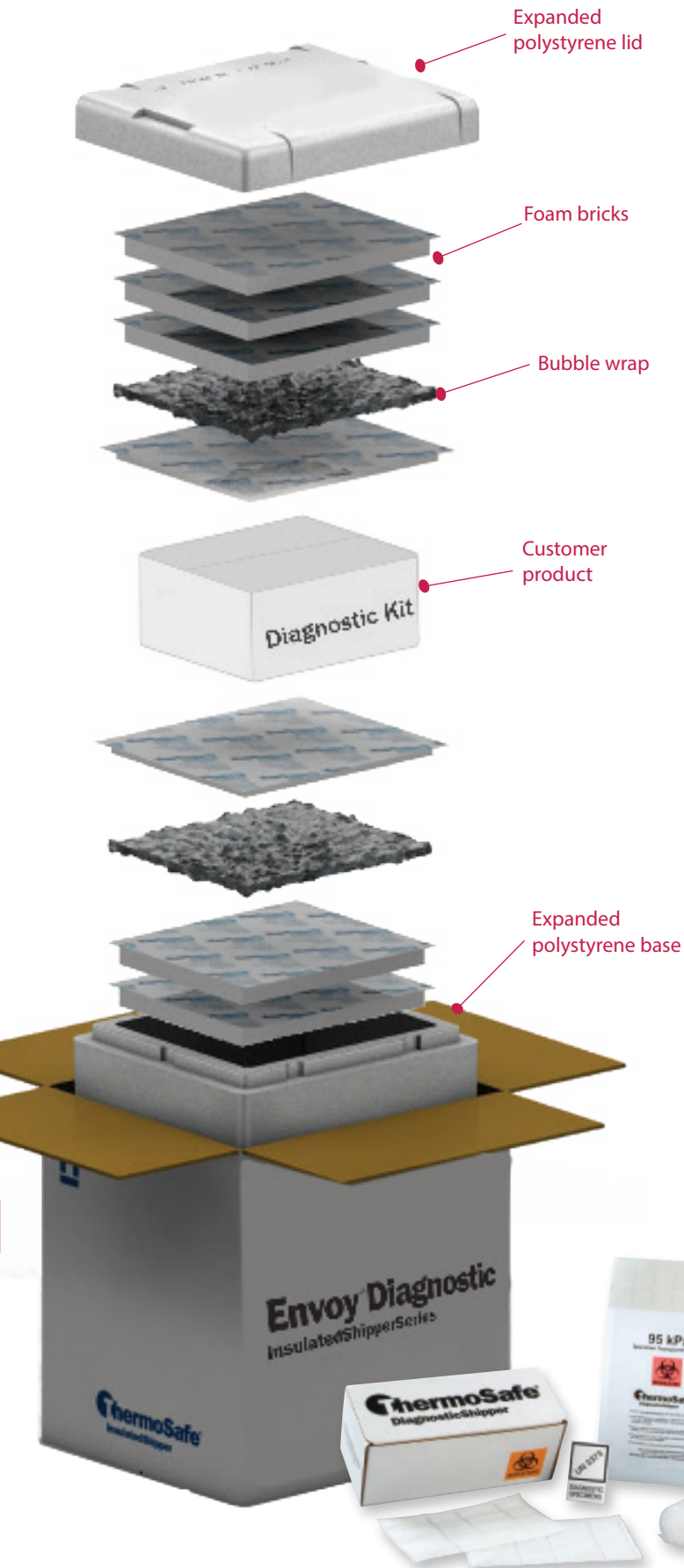
Designed to absorb and encapsulate spills in accordance with UN/DOT regulations, U.S. Postal Service and recommendations for the packaging and transportation of diagnostic specimens, biological materials, and other dangerous goods. Tissue-based paper substrate constructed with super-absorbent polymers help prevent leakage, and possible contamination.

Model	Dimensions [in.]	Sheet Capacity	Case Pack
0353162	3 x 3	90 ml of water 22.5 ml blood	10,000
03600160	6 x 6	360 ml of water 90 ml blood	500
03600161	12 x 12	1440 ml of water 360 ml blood	500

Dry Ice Machine - Ultra 0352559

Ideal for tissue preservation, specimen shipping, and biologicals manufacturing. The latest design in benchtop dry ice making utilizes a patented heat exchange technology. No need to dismantle machine to retrieve dry ice block. Provides up to 30% better yield from a standard 50 lb. CO₂ cylinder (with siphon).





Envoy® Diagnostic

Envoy is a simple and economical 2 to 8°C insulated shipping system that has been design-tested to ISCSilver™ ambient temperature profile to address the need for temperature assurance in moderate shipping conditions.

Envoy Diagnostic combines the simplicity of Envoy with Sonoco ThermoSafe's line of diagnostic kits to create user-friendly and economic solutions for refrigerated temperature control of diagnostic kits, blood samples and other diagnostic specimens.

- A convenient all-in-one solution with proven thermal performance
- Ideal for 1 to 2 day shipments and small payloads
- Packouts are simple to follow and incorporate foam bricks for uniform temperature coverage.

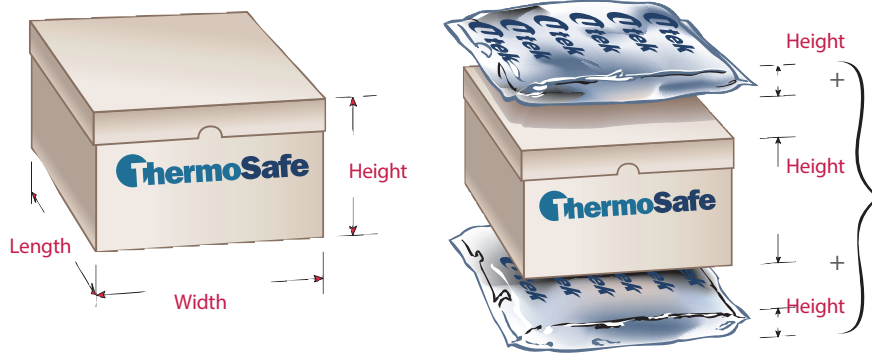
The table below offers a list of Diagnostic and Infectious Shippers that are offered in both configurations (kits and Envoy shippers).

Envoy Model #	Included Diagnostic Kit	Shipping Duration (Hrs)
Outer Dimensions: 15" x 13½" x 16" [381 x 337 x 406] mm		
Weight: 22 lbs [10kgs]		
03600117	03527C*	54
03600118	03527D*	54
03600120	0352556	54
03600119	0352830	54
03600121	03600148	54

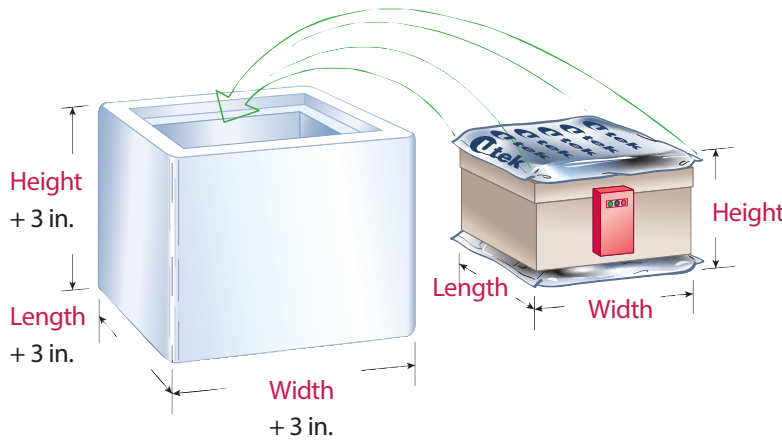
* Vials not included with the 03600117 and 03600118 models.

GUIDES

What size insulated shipper do I need?

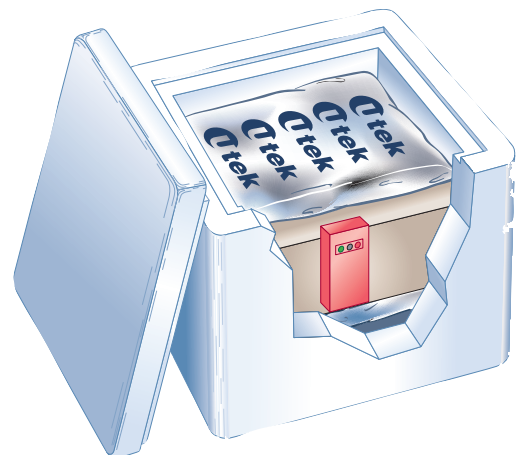


1. Place the product(s) to be shipped as compactly as possible on a flat surface.
2. Measure the product dimensions (length, width, and height).
3. If refrigerant is required, allow sufficient additional space. Depending on the refrigerant that will be used, it may be necessary to allow for space on one or more sides of the product.



4. From the inside dimensions column, (see product chart) select the smallest container that will hold your product(s) and any necessary refrigerant. For best results with EPS shippers, use a container with at least 1½" thick walls. For short trips or less temperature-sensitive products, containers with ¾"-1" thick walls may be adequate.
5. Place the product(s) and refrigerant in the container. Use a temperature data logger to monitor the temperature of the shipment while in transit.
6. Before closing the insulated container, fill all empty space with dunnage material to help maximize insulating performance.

To calculate outside dimensions:
 $\text{Inner Dimensions} + (\text{Wall Thickness} \times 2)$



What type of refrigerant do I need?

Sonoco ThermoSafe offers a wide selection of refrigerants for use with its insulated containers. Selecting the right refrigerant for your product is critical to maintaining the proper temperature during transit.

This table is intended to assist you with selecting the best refrigerant for your shipments.



Refrigerant	Temperature	Recommended Use	Other Considerations
Dry Ice	-78°C (-109°F)	Products which must be kept frozen for extended periods of time	Should not be used for products which may be damaged by extreme cold. Dry ice is regulated as a hazardous material in air transport
-23°C (-10°F)	-23°C (-10°F)	Products which must be kept frozen	To freeze, freezer must go below -23°C. Provides more lasting protection than standard gel packs
-1°C (+30°F)	-1°C (+30°F)	Products which must be kept cold for long periods of time	Maintains temperatures longer than standard gel packs
Standard Gel	0°C (+32°F)	Products that require a cost-effective alternative to wet ice	Call for pricing and availability information regarding custom printing and returnable tote programs
Moisture Guard	0°C (+32°F)	Products which must be protected from condensation damage	Multi-layer exterior minimizes surface condensation
Foam Brick	0°C (+32°F)	Product packouts that have limited space that require refrigerant to maintain shape when frozen or thawed	Vacuum sealed semi-rigid foam block offers consistent weight and shape
Rigid Bottle	0°C (+32°F)	Product shipments requiring maximum durability	Our most rugged refrigerant
Advanced Phase Change Materials	-40°C to +37°C		



ThermoSafe®

InsulatedShipper

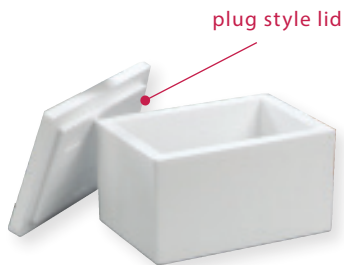


Our extensive line of EPS insulated containers offer the ideal solution for the safe storage and delivery of many refrigerated or frozen materials. This includes pharmaceuticals, laboratory specimens, serums and vaccines, human organs, culture pack, nuclear and isotope materials.

- Choose EPS only or EPS assembled in 200 lb [91 kg] test corrugated carton
- Choose insulating walls of 3/4 to 2 1/4 in. [19 to 57 mm]

LID STYLES

The images below show the difference between a plug-style & dome-style lid. The model numbers with the * next to them in the table to the right are those that are molded with a dome-style lid.



Construction		EPS/Foam Only		Wall Thickness [in]
EPS	EPS In Corrugated Carton	Inner L x W x H [in]	Outer L x W x H [in]	
03001200	03001201	24 x 18 x 21	26 x 20 x 23	1
03001202	0352812	24 x 13 7/8 x 12 1/2	28 1/4 x 17 1/4 x 15 5/8	1 1/8
03001203	03001204	23 1/4 x 15 13/16 x 6 5/16	24 7/8 x 17 7/16 x 8 3/8	3/4
03001205	03001206	23 3/8 x 14 1/8 x 23	27 7/8 x 19 x 28	2 1/4
03600133+	03600134+	23 x 10 x 6	25 x 12 x 8 1/2	1
0353086+	0353087+	23 x 10 x 4	25 x 12 x 6 1/2	1
03001207	03001208	21 9/16 x 13 7/16 x 10 5/8	24 x 15 7/8 x 12 3/8	1 1/8
03001209	0353046	21 x 15 1/8 x 15 1/4	24 x 18 x 17 7/8	1 1/8
03001210*	03001211*	19 3/8 x 11 1/4 x 3 7/8	22 5/8 x 14 7/8 x 7 1/4	1 1/2
03001212	03001213	19 3/8 x 9 x 10 3/8	22 7/8 x 13 3/8 x 13 3/8	1 1/2
03001214*	03001215*	19 1/4 x 12 3/8 x 12 1/4	23 3/8 x 16 3/4 x 16 1/2	2
03001216	0352828	19 x 14 5/8 x 10 3/8	22 3/8 x 18 1/8 x 13 3/8	1 1/2
0352532*	0353032*	19 3/8 x 12 3/8 x 12 1/4	22 3/8 x 15 3/8 x 15 3/8	1 1/2
03001217		2" RING		1 1/2
03001218	0352543	17 1/4 x 10 1/4 x 8	20 1/4 x 13 3/8 x 11	1 1/2
0352553*	03001220*	17 1/4 x 10 1/4 x 5	20 1/4 x 13 1/4 x 8	1 1/2
0352554		3" RING		1 1/2
03001221*	03001222*	17 1/4 x 10 x 12 3/4	21 11/16 x 14 7/16 x 16 3/4	2
03001223	0353044	17 7/8 x 10 1/8 x 10 5/8	20 1/4 x 13 1/4 x 13 3/4	1 1/2
03001224*	03001225*	17 x 17 x 12 5/8	21 x 21 x 16 3/8	2
03001226		3" RING		3
03001227	03001228	17 x 11 3/4 x 8	18 5/8 x 13 3/8 x 9 5/8	3/4
03001229	03001230	17 x 9 7/8 x 16 1/2	20 3/8 x 13 1/4 x 19 1/2	1 1/2
03001231	03001232	16 3/4 x 13 3/4 x 12 5/8	19 1/2 x 16 1/2 x 15 1/8	1 1/2
03001233	0353045	16 3/4 x 9 3/4 x 12 5/8	20 1/4 x 13 1/4 x 15 3/4	1 1/2
03001234	03001235	16 1/8 x 11 1/2 x 6"	19 1/4 x 14 1/2 x 9	1 1/2
03001236	03001237	15 13/16 x 12 13/16 x 8 1/2	18 1/8 x 15 1/8 x 10 7/8	1
03001238	03001239	15 3/8 x 9 5/8 x 7 7/16	17 x 11 1/4 x 9	3/4
03001240	03001241	14 x 10 5/8 x 6	18 x 13 3/8 x 9	1 1/2
03001242	03001243	13 3/4 x 11 x 6 3/4	16 1/2 x 13 3/4 x 8 1/4	1 1/8
03001244	03001245	13 3/8 x 9 5/8 x 5 1/8	16 x 12 1/8 x 7 3/4	1
03001246	03001247	13 1/2 x 13 x 10 1/2	17 1/2 x 16 1/2 x 13 1/2	1 3/4
03001248*	03001249*	13 1/4 x 6 1/4 x 1 7/8	16 1/4 x 9 1/4 x 4 7/8	1 1/2
03001250		3" RING		3
03001100	0352827	13 1/4 x 9 1/4 x 6	15 1/2 x 11 1/2 x 8	1
03001101*	03532101*	12 1/2 x 12 1/2 x 12	15 1/2 x 15 1/2 x 15	1 1/2

+ Top and bottom are approximately equal halves, not body and lid construction.

* Dome style lid.

PATENTED MODULAR SYSTEM

Creates a perfect match between payload and container capacity!



- Patented components (basic body, dome lid, and stackable rings) enable you to just add rings for added height
- Increase packing flexibility in warehouse - only one box footprint plus rings to vary capacity as needed
- Design features include dome lids, molded-in handles, rounded corners and edges, and recessed strapping grooves
- Designed to maximize temperature control and withstand the hazards of transport

Construction		EPS/Foam only		Wall Thickness [in]
EPS	EPS in Corrugated Carton	Inner L x W x H [in.]	Outer L x W x H [in.]	
03001102*	035210*	12½ x 12½ x 9	15½ x 15½ x 12	1½
03001103*	03001104*	12½ x 12½ x 7	15½ x 15½ x 10	1½
03001105*	03001106*	12½ x 12½ x 6	15½ x 15½ x 9	1½
03001107		3" RING		1½
0353076+	0353077+	12¼ x 8½ x 5¼	15½ x 11¾ x 8¼	1½
0352818	0353043	12 x 12 x 11½	16 x 16 x 15½	2
03001108*	03001109*	12 x 12 x 9¾	15¼ x 14 x 11½	1⅝
0353065*	035291*	11⅝ x 9⅞ x 9	15 x 13¼ x 12	1½
0352518A*	0353055*	11⅝ x 9⅞ x 7	14 ⅞ x 13¼ x 10 ⅞	1½
0353074*	03001111*	11¾ x 10 x 5	15 x 13¼ x 9 1/16	1½
03001112		2" RING		1½
03001113	0353063	11⅜ x 8⅜ x 11	13¾ x 10½ x 13	1
22293414	0353017	11 x 11 x 11⅝	14 x 14 x 14⅝	1½
03001114	03001115	10¾ x 6¾ x 5½	12 13/16 x 9⅞ x 8	1
03001116	0301117	10½ x 8 x 8½	14 x 11½ x 12	1¾
0353050	0353051	10½ x 7¼ x 10	13¾ x 10½ x 13½	1½
0353071	0353073	10 x 10 x 7	14 x 14 x 10	1¾
03001118	03001119	9½ x 7½ x 10⅜	11 x 9 x 12	¾
03001120	03001121	9½ x 7½ x 8⅜	11 x 9 x 10	¾
03001122	03001123	9½ x 7½ x 5⅝	11 x 9 x 7	¾
0353084+	03001124+	9⅜ x 8⅞ x 8⅞	12½ x 11¼ x 11⅝	1½
0353082+	0353083+	9⅜ x 8⅞ x 6⅜	12½ x 11¼ x 9½	1½
0353080+	0353081+	9½ x 8¼ x 4⅝	12 x 11¼ x 7⅞	1½
0353053*	0353054*	8 x 5⅞ x 11½	11 x 9 x 14½	1½
0352513*	0353052*	8 x 5⅞ x 8⅞	11 x 9 x 11⅞	1½
035254*	0352536*	8 x 5⅞ x 7	11 x 9 x 10	1½
035302*	1167614*	8 x 5⅞ x 4¼	11 x 9 x 7¼	1½
03001128		2" RING		1½
03001129	03001130	7 x 7¼ x 7½	11¾ x 11¾ x 11¼	2
03532102	0352544	6¼ x 5¾ x 7¾	11¼ x 10½ x 12⅝	2¼
03001131	03531	6½ dia. x 4 high	9½ x 9½ x 6⅞	1½
0353078	0353079	6¼ x 4¼ x 5½	9 x 7½ x 8	1½
035255	0353072	6¼ x 4¼ x 5½	11 x 9 x 10¼	2¼
03001133	03001134	6 x 4½ x 2½	8 x 6½ x 4½	1
0352810+	N/A	5⅞ x 4⅜ x 3	8 x 6 x 5¼	1
N/A	03001135	4½ dia. x 7½ high	7¼ x 7¼ x 9	1½



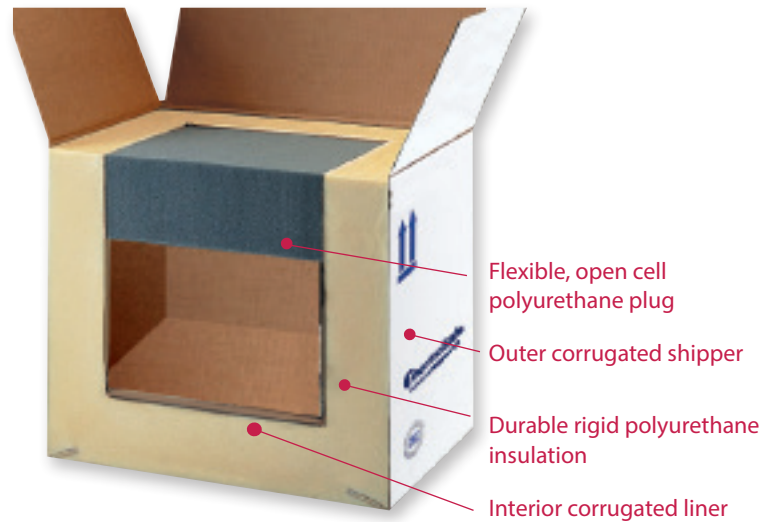
ThermoSafe®

InsulatedShipper-PUR

These high performance polyurethane containers meet the needs of the most demanding temperature-sensitive payloads. Polyurethane insulation offers greater insulating capability when compared to same size EPS containers.

Thick walls and 200 lb [91 kg] outer corrugate offer protective shock absorption and cushioning during shipping and handling.

- Protects highly temperature-sensitive shipments from mild to extreme ambient temperature exposure
- Provides extensive protection for long range journeys
- Complies with international clean air regulations and is CFC and HCFC-free
- Withstands crush compression in excess of 5,000 lbs [2 tons]
- Includes flexible polyurethane foam plug seals the top, cushions and insulates contents, and vents dry ice



Rigid, one-piece, three-layer laminate construction provides excellent temperature protection, exceptional strength and durability.



Pallet		Case		Wall Thickness	Dimensions L x W x H [in]		Empty Weight [lbs]
Model	Qty	Model	Qty		Inner	Outer	
03532110	2	03532111	1	3"	30½ x 21¼ x 19¾	37¾ x 28 x 24¼	26
03530006	12	03530002	1	2"	33¼ x 9¼ x 13½	28 x 14 x 20¾	9½
03532112	4	03532113	1	3"	22¼ x 17½ x 19¾	29 x 24¼ x 24¼	17½
03532114	12	03532115	1	1½"	19 x 15¾ x 13¾	22¾ x 19½ x 19½	9
03532116	12	03532117	1	3"	18½ x 18¼ x 16¾	25¼ x 25 x 24¾	17½
03530205	8	03530003	1	2"	18½ x 18¼ x 16¾	23¼ x 23 x 24	14
03530020	12	03530021	1	2"	18½ x 14½ x 12	23¼ x 19¼ x 19¼	10
03532119	12	03532120	2	3"	17½ x 9½ x 14½	24¼ x 16¼ x 21¾	12
03532121	18	03532122	2	2"	17¼ x 9½ x 15¼	22 x 14¼ x 22½	9
03532123	12	03532124	2	1½"	16 x 16 x 13½	19¾ x 19¾ x 19¼	8
03530052	18	03530001	2	2"	16¼ x 9¼ x 10¼	21 x 14 x 17½	7½
03532125	36	03532126	2	1"	15¼ x 10¾ x 11	18 x 13½ x 15¼	4½
03532127	24	03532128	2	1½"	15 x 13 x 11	18¾ x 16¾ x 16¾	6½
03532129	18	03532130	2	2"	14¼ x 10 x 15¼	19 x 14¾ x 22½	8
03532131	32	03532132	2	2"	14 x 8 x 10	18¾ x 12¾ x 17¼	6
03532133	8	03532134	1	3"	13½ x 13½ x 16½	20¼ x 20¼ x 24½	14½
03532135	45	03532136	4	1"	12¼ x 12¼ x 8	15 x 15 x 12¼	4
03532137	18	03530005	2	3"	12 x 10 x 13	18¾ x 16¾ x 21¼	10½
03532138	8	03532139	1	3"	11½ x 11½ x 32⅞	18¼ x 18¼ x 36⅞	16
03532140	24	03532141	4	3"	11 x 8½ x 7	17¼ x 15¼ x 15¼	7
03532142	36	03530000	3	2"	11 x 8 x 7	15¾ x 12¾ x 14¼	4
03532143	60	03532144	8	1"	10¾ x 7 x 5	13⅞ x 9⅞ x 9¼	2
03532145	45	03532146	4	1"	10 x 10 x 8	12¾ x 12¾ x 12¼	3
03532147	36	03532148	8	1½"	9¼ x 7 x 7¼	13 x 10¾ x 13	3
03530051	18	03532150	2	3"	8 x 7⅞ x 15	14¾ x 13⅞ x 23¼	9
03532151	48	03530004	4	3"	8 x 6 x 8	14¾ x 12¾ x 16¼	5½
03532152	50	03532153	8	2"	5¼ x 5¼ x 10⅞	10 x 10 x 17⅞	3
03532154	50	03532155	8	2"	4½ x 4½ x 8	9½ x 9⅞ x 14⅞	2½



ThermoSafe®

InsulatedShipper-VIP

These high performance insulated shippers are the best choice for longer duration shipments of high value, temperature sensitive products into global markets.

Our Vacuum Insulated Panel (VIP) Shippers have a tough, non-metalized barrier and outer structural film – yielding a robust shipping container with thermal performance that far surpasses conventional foam boxes.

VIP panels are environmentally neutral and contain no CFCs or HCFCs.

Outer structural film provides tight panel fit and provides abrasion protection for a reliable, reusable shipping system.

IMPROVED THERMAL PERFORMANCE

- Reduces gel refrigerant/dry ice requirements
- Reduces overall package size
- Extends shipping duration



PALLET		CASE		Capacity [cu ft]	Dimensions L x W x H [in]		Wall Thickness [in]
Model	Qty	Model	Qty		Inner	Outer	
03600140	6	03525052	1	5.50	24 x 22 x 18	26 x 24 x 20	1
03600139	12	03525051	1	2.00	18 x 16 x 12	20 x 18 x 14	1
03531111	48	03525049	1	0.69	12 x 10 x 10	14 x 12 x 12	1
03600137	72	03525047	8	0.37	10 x 8 x 8	12 x 10 x 10	1
03600138	48	03525050	4	0.76	11 x 10 x 12	12 x 11 x 13	½
03531114	80	03525048	8	0.42	9 x 8 x 6	10 x 9 x 11	½
03600136	140	03525046	12	0.25	9 x 8 x 6	10 x 9 x 7	½
03600135	432	03525045	36	0.07	6 x 5 x 4	7 x 6 x 5	½

PolarPack®

PolarPack refrigerants provide thermal solutions for temperature critical packages during transit. Available in a broad selection of styles and a multitude of sizes, they are designed to provide reliable temperature protection for a vast array of products and packages.



Standard 0°C (+32°F)

An economical alternative to wet ice, enclosed in durable 100µ [4.1 mil] polyethylene film. PolarPack gel packs provide reliable refrigeration for the safe transport of temperature-sensitive products.

Model	Weight [oz]	Dimensions L x W x H [in]
03532100	3	3¼ x 4 x 5⁄8
03600100	6	5½ x 3½ x ¾
03600101	8	6½ x 3½ x ¾
03530110	12	6 x 5½ x 1
03600102	16	6½ x 5½ x 1
0353109	24	8 x 5½ x 1¼
03600103	32	10½ x 5½ x 1¼
03600104	48	10½ x 7½ x 1¼



Rigid Bottle 0°C (+32°F)

Blow-molded rigid plastic bottles. Our most durable packs are multi-purposed and designed to withstand rugged warehouse packing environments.

Model	Weight [oz]	Dimensions L x W x H [in]
0353156	16	7 x 3½ x 1½
03531270	32	8 x 5 x 1¾



Foam Brick 0°C (+32°F)

These semi-rigid foam bricks never change shape during freezing, thawing or transit. Each brick is vacuum-sealed for consistent weight and shape, enabling superior surface contact for more consistent temperature control.

Model	Weight [oz]	Dimensions L x W x H [in]
03530010	7.5	4½ x 4 x ¾
03530011	15	4½ x 4 x 1½
0353153	18	8¼ x 5½ x ¾
0353154	23	5 x 5 x 1¾
0353155	24	6½ x 4½ x 1½
03530012	31	9 x 4 x 1½
22031893	56	11¼ x 9¼ x 1
03530013	64	10½ x 6½ x 1¾



Moisture Guard 0°C (+32°F)

Multi-layered exterior minimizes surface condensation, which protects product from moisture damage.

Model	Weight [oz]	Dimensions L x W x H [in]
03530202	8	6 x 4¾ x ¾
03530200	12	6 x 5½ x ¾
0353150	16	6½ x 5½ x ¾
03530201	24	8 x 5½ x 1¼
0353151	32	10½ x 5½ x 1¼
0353152	48	10½ x 7½ x 1¼

U-tek®



Superior protection for shipping temperature-sensitive materials. Maintains critical temperatures of serums, test samples, live or frozen tissues, organs, and pharmaceuticals for extended periods. Laminated, metallized film exterior provides radiant heat barrier and resists punctures.

Model	Formula	Weight [oz]	Dimensions L x W x H [in]
035286	-1°C (+30°F)	8	6 x 4 x ¾
03528B	-1°C (+30°F)	12	6¾ x 4 x 1
035257B	-1°C (+30°F)	16	6½ x 6½ x 7/8
03528C	-1°C (+30°F)	24	7½ x 6½ x 1
035257D	-1°C (+30°F)	32	9¾ x 7¾ x 1
035257F	-1°C (+30°F)	48	10½ x 7¾ x 13/16
0353047	-23°C (-10°F)	8	6 x 4 x ¾
035281	-23°C (-10°F)	12	6¾ x 4 x 1
035257C	-23°C (-10°F)	16	6½ x 6½ x 7/8
035285	-23°C (-10°F)	24	7½ x 6½ x 1
03600106	-23°C (-10°F)	32	9¾ x 7¾ x 1
035257G	-23°C (-10°F)	48	10½ x 7¾ x 13/16

U-tek®

-1°C/+30°F-Mat

-1°C/+30°F-Single

Cushions fragile shipments, and won't dilute ice baths or damage samples. Remains frozen longer than regular ice, without the melting mess.

- May be refrozen and reused, withstands pressures in excess of 60 lb per square inch for five minutes or longer
- Refrigerant contains neutral pH distilled and deionized water, and proprietary materials certified by the U.S. Food and Drug Administration as food grade chemicals



Model	Style	Description	Dimensions	Case Weight [lb]
03528D	Mat	1 roll	16" W x 34 ft L	50
03600107	Square Mat	28 sheets	16" W x 14¾" L	50
035283	Singles	Approximately 1500 packets		50



Innovative Phase Change Material

PureTemp™ Phase Change Materials liquefy or solidify at precise temperatures. When the surrounding temperature falls below the phase temperature, they solidify and release their stored energy. If the temperature rises above the phase temperature, they liquefy and absorb excess energy.

These two phenomena protect the product from excessive heat and cold to help maintain product temperature for extended periods of time. PureTemp is engineered to react to a precise temperature, from -40° to +37° C, and to operate in a very narrow temperature range. It is also renewable, biodegradable, and non-toxic.

PureTemp comes in foam bricks and hard bottles.

SUSTAINABILITY

- Non-Hazardous, 100% environmentally friendly
- USDA BioPreferred® designation
- Reduces shipping weight, freight, warehouse space, and packout space

TOTAL COST CONTROL

- Increases payload efficiency
- Reduces shipping weight and freight costs. Less PureTemp material is required for temperature control when compared to water-based refrigerants
- Simplifies packout inventory and process
- Decreases box size for less warehouse and packout space
- Eliminates equilibration time
- Increases shipping duration

TIGHTER TEMPERATURE CONTROL

- Extensive range of temperature options
- Constant temperature during freezing or melting provides constant temperature control
- Eliminates thermal shock with fewer excursions

Model	PCM Type	Phase Temp	Weight [oz]	Dimensions L x W x H [in]	Case Qty
03600112	PCM Rigid Bottle	1° C	29.2	8 x 8 x 1	15
03600115	PCM Rigid Bottle	1° C	45.2	10 x 10 x 1	12
03600111	PCM Rigid Bottle	4° C	26.2	8 x 8 x 1	15
03600114	PCM Rigid Bottle	4° C	42.8	10 x 10 x 1	12
03600113	PCM Rigid Bottle	23° C	26.2	8 x 8 x 1	15
03600116	PCM Rigid Bottle	23° C	42.8	10 x 10 x 1	12
03600108	Foam Brick	4° C	11.0	9 x 4¾ x ½	48
03600109	Foam Brick	4° C	25.5	10¾ x 9¾ x ½	24
03600110	Foam Brick	20° C	25.5	10¾ x 9¾ x ½	24

Contact your Fisher rep for availability of additional temperature ranges.

Ready-Engineered Insulated Shipping Systems



Shipper	Envoy®	Certis®	Greenbox®
Benefit Summary	<ul style="list-style-type: none"> Design-tested per ISCSilver™ Ambient Profile for moderate or partially temperature-controlled distribution conditions Simple and Economical 	<ul style="list-style-type: none"> Pre-Qualified: Choice of two different ambient profiles: <ol style="list-style-type: none"> ISCGold™ Ambient Profile for most rigorous ambient conditions ISCSilver™ Ambient Profile for moderate or partially temperature-controlled distribution conditions 	<ul style="list-style-type: none"> Pre-Qualified Robust thermal performance Phase Change Materials (PCM) are organic based and use biodegradable materials Re-use and Refurbish programs are available
Transit Duration	30 hrs. to 54 hrs.	30 hrs. to 126 hrs.	24 hrs. to 144 hrs.
Ideal for:	<ul style="list-style-type: none"> Blood Refrigerated, frozen, and controlled room temperature pharmaceuticals Specimens Reagents Tissues and other temperature sensitive items 		
Construction	<ul style="list-style-type: none"> EPS 	<ul style="list-style-type: none"> EPS, PUR, or VIP 	<ul style="list-style-type: none"> Vacuum insulated panels Plastic corrugated liner

Envoy[®]

A Simple and Economical Solution

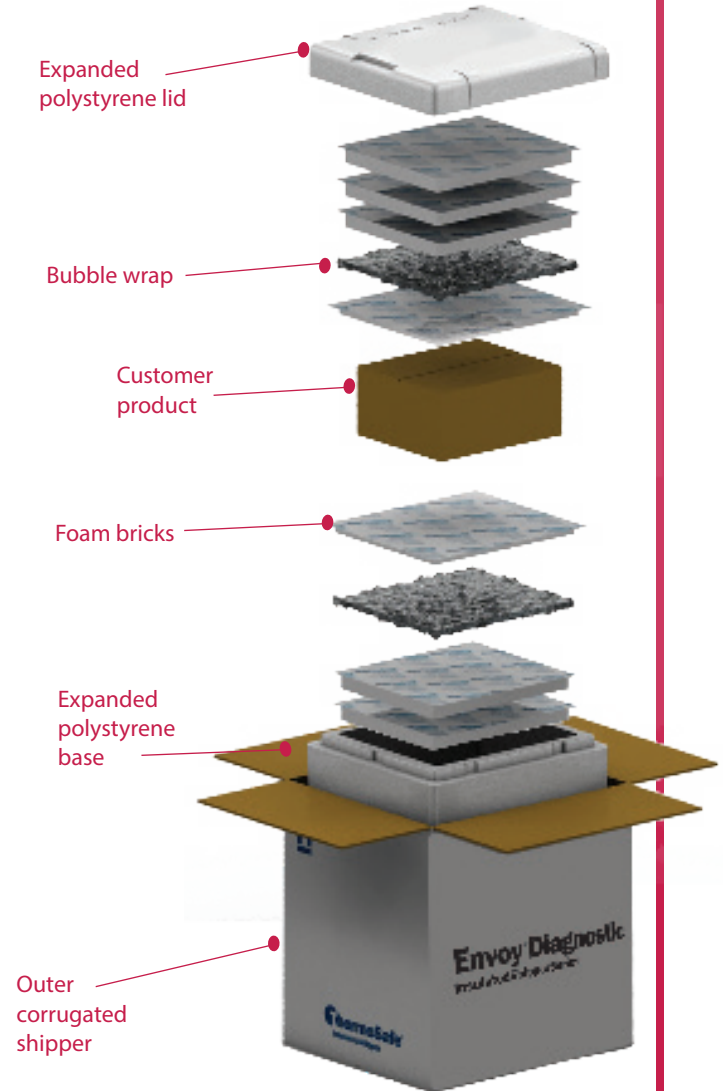
As the global leader in temperature assurance packaging, Sonoco ThermoSafe is recognized for its expertise and advanced solutions. We also realize that our customers require solutions tailored to address the needs of a wide range of shipping conditions.

For that reason, we've applied our engineering expertise to create Envoy Insulated Shippers—a simple, economical solution for less complex shipping needs, design-tested by ISC Labs.

Envoy is designed to the ISCSilver[®] ambient temperature profile, which reflects more moderate shipping conditions.

FEATURING:

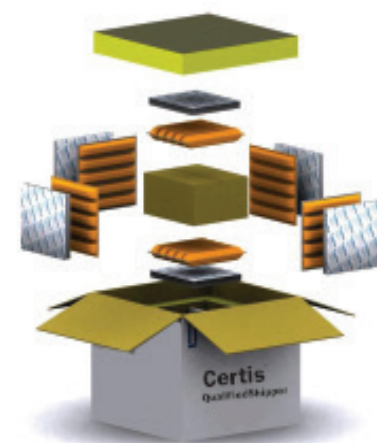
- Simplistic packouts, ideal for 1-2 day shipments and small payloads
- Uniform seasonal packouts that use foam bricks that maintain their shape for easy assembly
- Standard components



		Small 1-Day	Large 1-Day	Small 2-Day	Large 2-Day
Model Number	Summer	03531218	03531220	03531222	03531224
	Winter	03531219	03531221	03531223	03531225
Shipping Duration		30 Hours		54 Hours	
Temperature		2-8°C	2-8°C	2-8°C	2-8°C
Payload Capacity		2 L	6 L	4 L	7L
Payload Dimensions in. [mm]		7" x 5" x 3" [178 x 127 x 76]	10.5" x 8.75" x 4" [267 x 222 x 102]	10.5" x 8.75" x 2.5" [267 x 222 x 63]	10.5" x 8.75" x 4.5" [267 x 222 x 114]
Container Outer Dimensions in. [mm]		11" x 9" x 14.5" [279 x 229 x 368]	15" x 13.25" x 12" [381 x 337 x 305]	15" x 13.25" x 14" [381 x 337 x 356]	15" x 13.25" x 16" [381 x 337 x 406]
Weight lb. [kg]		8 lb [4kg]	11lb [5kg]	22 lb [10kg]	22 lb [10kg]

Certis®

ThermoSafe Certis Qualified Shippers deliver the ultimate protection for your temperature-sensitive pharmaceuticals and biological specimens, and meet the toughest ambient profiles of any premium shipper in the industry. So you can rest easy, knowing that your products will ship safely anywhere in the world.



- Extended shipping durations allow for temperature-sensitive products to be shipped anywhere throughout the world
- Simple and easy-to-follow packing steps
- High payload efficiencies result in reduced shipping weights, freight costs, and tight temperature control

	Certis Gold				Certis Silver			Certis Silver Universal					
	XS	S	M	L	S	M	L	L	L	M	L	XL	
Temperature Range	2° to 8° C				2° to 8° C			-20° C	2° to 8° C		15° to 25° C		
Shipping Duration (Hours)	78	78	78	126	30-54	30-54	54-78	72	54	96	72	78	
Payload Capacity cu in. [L]	292 [4.8]	472 [7.7]	756 [12.4]	1,196 [19.6]	296 [4.9]	428 [7.0]	882 [14.5]	897 [14.7]	898 [14.7]	720 [11.8]	879 [14.4]	2,135 [35.0]	
Packout	Universal				Summer & Winter			Universal					

Models Available in 2-8°C Temperature Range

Model	Packout	Insulation	Duration [Hrs]	Container O.D. in. [mm]			Payload Dimensions in. [mm]			Weight lb [kg]	Dim Wt. lb [kg]
				L	W	H	L	W	H		
03531201	Universal	PUR	78	21.25 [540]	21.25 [540]	19 [483]	8.5 [216]	6.25 [159]	5.5 [140]	40 [18]	37 [17]
03531202	Universal	PUR	78	23.75 [603]	23.75 [603]	19.5 [495]	10.5 [267]	9 [229]	5 [127]	50 [23]	48 [22]
03531203	Universal	PUR	78	27.75 [705]	23 [584]	21.25 [540]	10.5 [267]	9 [229]	8 [203]	55 [25]	60 [27]
03531204	Universal	VIP	126	24.75 [629]	18.75 [476]	21 [533]	14.5 [369]	8.25 [210]	10 [254]	80 [36]	45 [20]
03531217	Universal	EPS	54	21.25 [540]	21.25 [540]	20.75 [527]	9.25 [235]	9.25 [235]	10.5 [267]	36 [16.3]	56 [124]
03531205	Summer	EPS	30	22.25 [565]	17.5 [445]	16 [406]	10.5 [267]	5.25 [133]	5.375 [137]	15.7 [7.1]	38 [83]
03531206	Winter			21.75 [552]	17.75 [451]	17.5 [445]	10 [254]	6 [152]	7.125 [181]	19.1 [8.7]	41 [90]
03531207	Summer	EPS	30	22.25 [565]	17.5 [445]	16 [406]	10.5 [267]	5.25 [133]	5.375 [137]	21.3 [9.7]	38 [83]
03531208	Winter			21.75 [552]	17.75 [451]	17.5 [445]	10 [254]	6 [152]	7.125 [181]	22.2 [10.1]	41 [90]
03531209	Summer	EPS	54	23.75 [603]	23.75 [603]	19.5 [495]	10.5 [267]	10.5 [267]	8 [203]	39.5 [17.9]	66 [146]
03531210	Winter			23.75 [603]	23.75 [603]	19.5 [495]	10.5 [267]	10.5 [267]	8 [203]	59.1 [26.8]	66 [146]
03531211	Summer	EPS	78	23.75 [603]	23.75 [603]	19.5 [495]	10.5 [267]	10.5 [267]	8 [203]	59.1 [26.8]	66 [146]
03531212	Winter			23.75 [603]	23.75 [603]	19.5 [495]	10.5 [267]	10.5 [267]	8 [203]	59.1 [26.8]	66 [146]
03531213	Summer	EPS	78	23.75 [603]	23.75 [603]	19.5 [495]	10.5 [267]	10.5 [267]	8 [203]	59.1 [26.8]	66 [146]
03531214	Winter			23.75 [603]	23.75 [603]	19.5 [495]	10.5 [267]	10.5 [267]	8 [203]	59.1 [26.8]	66 [146]
03531215	Summer	EPS	78	23.75 [603]	23.75 [603]	19.5 [495]	10.5 [267]	10.5 [267]	8 [203]	59.1 [26.8]	66 [146]
03531216	Winter			23.75 [603]	23.75 [603]	19.5 [495]	10.5 [267]	10.5 [267]	8 [203]	59.1 [26.8]	66 [146]

An Environmentally-Friendly and Sustainable Solution

GREENBOX® components are reusable, organically-based, and our phase-change materials are non-toxic and fully biodegradable. Customers can use GREENBOX again and again.

GREENBOX is a passive system designed for 100% reuse. Additionally, studies show that our PureTemp Phase Change Material suffers no thermal degradation after more than 20,000 freeze/thaw cycles. The non-petroleum phase-change technology contains no harmful chemicals or hazardous wastes.



Model	Duration (Hours)	Temperature	Payload Dimensions L x W x H in. [mm]	External Dimensions L x W x H in. [mm]	Weight lbs [kg]
03531240	48	<-15° C	7.1" x 7.5" x 1.6" [180 x 191 x 41]	9" x 9" x 9" [229 x 229 x 229]	10.6 [4.8]
03600126	24	2° to 8° C	7.1" x 7.5" x 3.6" [180 x 191 x 91]		7.9 [3.6]
03600127	48	2° to 8° C	7.1" x 7.5" x 1.6" [180 x 191 x 41]		10.6 [4.8]
03531241	72	15° to 30° C	7.1" x 7.5" x 3.6" [180 x 191 x 91]		7.9 [3.6]
03531242	120	15° to 30° C	7.1" x 7.5" x 1.6" [180 x 191 x 41]		10.6 [4.8]
03531243	24	<-15° C	9.2" x 9.6" x 3.6" [234 x 244 x 91]	12" x 12" x 12" [305 x 305 x 305]	22.5 [10.2]
03531244	72	<-15° C	9.6" x 9.6" x 1.6" [244 x 244 x 41]		28.0 [12.7]
03600128	24	2° to 8° C	9.6" x 9.6" x 5.5" [244 x 244 x 140]		17.0 [7.7]
03600129	48	2° to 8° C	9.2" x 9.5" x 3.6" [234 x 241 x 91]		22.5 [10.2]
03600130	72	2° to 8° C	9.6" x 9.6" x 3.6" [244 x 244 x 91]		22.5 [10.2]
03600131	96	2° to 8° C	9.2" x 9.6" x 3.6" [234 x 244 x 91]	24" x 14" x 12" [610 x 356 x 305]	22.5 [10.2]
03531245	96	15° to 30° C	9.6" x 9.6" x 5.5" [244 x 244 x 140]		17.0 [7.7]
03531246	120	15° to 30° C	9.2" x 9.6" x 3.6" [234 x 244 x 91]		22.5 [10.2]
03531247	96	<-15° C	13.5" x 5.3" x 7.6" [343 x 135 x 193]		22.5 [10.2]
03600132	72	2° to 8° C	17.3" x 9.3" x 7.6" [193 x 236 x 193]		45.8 [20.8]
03531248	144	15° to 30° C	17.3" x 9.5" x 7.6" [236 x 241 x 193]	45.8 [20.8]	

ThermoSafe® PalletShipper-PUR

EF4100 Pallet Shipper 03600143

The ThermoSafe® EF4100 with new EasyLoc™ Design is the next generation insulated pallet shipper, and features the easiest assembly in the industry. It is specifically designed for life science customers to use in the transport of high-value, temperature-sensitive pharmaceutical, biological, and vaccine products.

EF2700 Pallet Shipper 03600142

The ThermoSafe® Pallet Shipper-PUR is a pallet sized insulated packaging system with unsurpassed durability for shipping and protecting bulk loads of refrigerated and frozen products.

- Rugged corrugated outer casing; 3" rigid polyurethane insulation
- Reusable 6-piece design assembles in minutes and folds flat when empty for storage or return.
- Optional components include triple-wall pads, spacers, flexible polyurethane foam plug (for less than full loads), and custom pallets



Model	Vol. [ft ³]	Dimensions L x W x H*		Empty Weight [lbs]
		Inner	Outer	
03600141	15	32" x 24" x 34"	39½" x 31¾" x 45¾"	64
03600142	27	39" x 32¼" x 37"	46⅜" x 39⅝" x 44"	77
03600143	41	41¼" x 33⅜" x 50⅜"	49¼" x 40⅞" x 56⅜"	92
03600144	61	50" x 46" x 46"	57¾" x 53¾" x 53"	151

*Each shipper should be used with a pallet (not included).

Envoy & Certis Series Pallet Shippers

More temperature options. Fewer packing components. Easy assembly.

Designed to meet the unique transport requirements of pharmaceuticals, biologics, vaccines, and other high-value life science products.

Featuring:

- Refrigerated, frozen, and CRT versions
- Off-the-shelf convenience and fast delivery from stock

Series	Temp.	Duration (hrs)	Packout	Payload Dimensions L x W x H in. [mm.]
Envoy	< -20° C	48	Universal	33 x 24½ x 36½ [838 x 622 x 927]
Envoy	< -15° C	120	Universal	33 x 24½ x 36½ [838 x 622 x 927]
Envoy	2-8° C	96	Universal	22 x 24½ x 36½ [838 x 622 x 927]
Certis	2-8° C	96	Seasonal	33 x 29½ x 22 [838 x 749 x 559]
Certis	2-8° C	120	Seasonal	35 x 29¾ x 9 [889 x 756 x 229]
Certis	2-8° C	120	Seasonal	48 x 40 x 30 [1219 x 1016 x 762]
Envoy	1-10° C	144	Universal	33 x 24½ x 36½ [838 x 622 x 927]
Envoy	15-25° C	72	Universal	33 x 24½ x 36½ [838 x 622 x 927]
Envoy	10-30° C	120	Universal	33 x 24½ x 36½ [838 x 622 x 927]



ThermoSafe®

Medical Transporter

Insulated expanded polypropylene medical transporters are ideal for on-site collection, storage and transport of temperature sensitive specimens, medications, medical devices, and organs.

BOTH UNITS FEATURE:

- Durable nylon clad transporter with expanded polypropylene container that is stain and impact resistant
- Operating instructions and test data
- Extra space for crushed ice and refrigerant gel packs
- Heavy-duty grip handles for easy lifting
- Side loading clear plastic document holder
- Five disposable 100 μ [4 mil] polyester bags are included—(replacement bags available)
- Conformance with 21 CFR, Part 600.15 (IATA)



Medical Transporter 0353157

- Qualified by ISC Labs for temporary storage and transport of packed red blood cells with (3) 32 oz [907 g] PolarPack Rigid Bottle refrigerants and (2) 16 oz [454 g] PolarPack refrigerants for operating room storage and blood bank transport
- Maintains up to 8 packed red blood cell units at 1° C-6° C while in storage for 6 hours or more and between 1° C-10° C while in transit for up to 24 hours
- Lightweight, ergonomic design with adjustable and retractable handle and wheels
- Qualification report included



Dolly sold separately

Medical Transporter 03531100

- Qualified by ISC Labs for temporary storage and transport of both platelet (20° C-24° C for up to 8 hours) and non-platelet production (1° C-10° C for up to 24 hours) whole blood with crushed wet ice
- Includes operating instructions and test data for cooling platelet and non-platelet production blood
- Qualification report included

ThermoSafe® Medical Transporter

ThermoSafe Medical Transporters

are ideal for short-term storage, carrying and delivering of temperature-sensitive tissues, serums, vaccines, cultures, specimens, and other temperature-sensitive materials.

- Washable, weather-resistant blue nylon shell printed with standard biohazard symbol, with polyethylene foam insulation
- Durable, reusable, and ideal for field samples
- Zipper lock closure



Models 03531104 & 03531105

Includes removable, rigid thermoformed tray— ideal for washing and reusing; prevents leaking inside and out of transport unit; reinforces durability.

Model 03600162:

Inner partition divides unit and separates specimens. Features built-in lid compartments for U-tek refrigerant packs.

Lightweight, easy to carry and transport. Model 03600162 includes a vial foam insert that holds (24) 5 to 15 ml vials and one Model 035281 U-tek® 12 oz [340 g].

Model	Volume ft ³	Blood Unit Capacity (w/ Refrigerant)	Wall Thickness [in.]	Dimensions L x W x H		Empty Weight [lb]
				Inside [in.]	Outside [in.]	
03531104	0.30	N/A	¼	5 x 7¾ x 9¾	11⅞ x 8¾ x 11	2
22046788	0.30	N/A	¼	9¾ x 7½ x 7½	10½ x 8 x 8	1
03600162	0.30	N/A	⅜	9¾ x 7½ x 7½	10½ x 8 x 8	1
03531105	0.47	N/A	⅜	7⅞ x 10¾ x 9¾	14¾ x 11¾ x 11	2
0353157	0.95	8	1	15¾ x 10¾ x 12¾	17¾ x 12¾ x 13¾	7.1 w/baskets
03531100	1.60	16	1	15¾ x 10¾ x 22¾	17¾ x 12¾ x 24¾	12.2 w/baskets

ThermoSafe Nylon Carriers

Rugged, lightweight totes ideal for transport of diagnostic and clinical specimens.

Washable, weather-resistant nylon shell with thick-walled polystyrene foam insulation. Adjustable nylon carrying straps, for hand or shoulder carrying. Five models with capacities from 5 to 45 liters [0.17 to 1.6 cubic feet].



Volume ft ³	Wall Thickness [in.]	Dimensions LxWxH		Closure	Empty Weight [lb.]	Interior	Exterior Colors
		Inside [in.]	Outside [in.]				
0.17	2¼	6½ x 5¾ x 7¾	11⅝ x 10½ x 12⅝	Zipper	2.0	Polystyrene	
0.82	1½	17¼ x 10¼ x 8	20¼ x 13⅜ x 11	Velcro®	3.0	Nylon	Red or Blue Nylon
0.96	2	12 x 12 x 11½	16 x 16 x 15½	Bayonet-style clip	3.5	Nylon	
1.0	1½	17½ x 10⅞ x 10⅞	20¼ x 13¾ x 13¾	Velcro®	3.0	Nylon	
1.6	1½	17 x 9⅞ x 16½	20⅜ x 13¾ x 19½	Bayonet-style clip	4.5	Nylon	Blue Nylon

ISCLabs®

Design & Testing Services Available

The ISC Labs Difference

ISC Labs has a specialized focus on engineering and testing services to provide optimized temperature assurance packaging solutions for each customer's specific needs.

Industry-leading thermal modeling capabilities enable rapid development of highly optimized custom solutions. Multiple design alternatives are presented to allow each customer the ability to easily analyze their options. Materials including EPS, PUR, VIP, and phase change materials are prototyped as necessary.

Thermal testing is accompanied by distribution testing to prove each temperature assurance packaging solution not only maintains temperature control, but also withstands the rigors of distribution.

Laboratory and engineering staff work with clients throughout all phases of the packaging development and testing process. Engineering professionals review test progress, develop modifications, and recommend alternative approaches to ensure the client's valuable products maintain their temperature requirements during each stage of the "cold chain."



For more information on ISC Labs' thermal package design, testing, and qualification services, visit our website or call our customer service department at +1 800 766 7000.



SONOCO **THERMOSAFE**[®]

Sonoco ThermoSafe[®], a unit of Sonoco Products Company, is the leading global provider of temperature assurance packaging for the safe and efficient transport of bio-substances including blood, plasma, organs, tissues, or any other temperature sensitive specimens. Our shipping solutions mitigate risk for our customers and ensure product efficacy throughout the extremes of a supply chain. Sonoco ThermoSafe has operations in North America, Europe, Asia, and South America to assure close proximity to our customers.

Our vast product offering features industry leading technology that encompasses refrigerated, frozen, or controlled room temperature applications. In addition, Sonoco ThermoSafe's ISC Labs[®] design and testing services deliver individualized and innovative packaging solutions along with qualification and validation services to meet all regulatory requirements.

For customer service, call 1-800-766-7000
To fax an order, use 1-800-926-1166
To order online: www.fishersci.com



Part of Thermo Fisher Scientific