

# Thermo Scientific Matrix Barcoded Tubes and Racks

Identify and track your samples  
for optimal sample storage

## Thermo Scientific™ Matrix™ 2D Barcoded ScrewTop Tubes in Barcoded Racks

Matrix 2D Barcoded ScrewTop Storage tubes are now available in a standard barcoded latch rack. The barcoded latch rack provides permanent 2D, linear, and human readable codes on 3 sides of the rack. A 2D barcode on the rack bottom enables orientation detection and identification when using automated storage equipment. These additions to the Matrix ScrewTop Storage tube portfolio allow visual sample identification in a range of laboratory procedures and eliminate the need for secondary labeling.



### Eliminate Secondary Labeling Steps.

Matrix 2D Barcoded ScrewTop Storage tubes are available pre-printed with 1D and human-readable codes that match the tube's 2D code. Laser etched 2D, linear and human readable barcodes are also included on the sides of the standard latch racks. The additional barcoding on tube and rack eliminates the need for the secondary application of labels, streamlining storage procedures.

**Enhanced Secure Tracking.** A permanently bonded, unique 2D barcode is laser etched onto the base of every tube to securely identify and track samples. The linear and human readable codes match this unique 2D barcode, allowing 1D scanning or visual identification of samples across satellite or collaborative sites without 2D readers. Complementary Thermo Scientific 2D and 1D barcode readers scan and instantly decode each tube's barcode into any application or database. Laser etched 2D, linear, and human readable barcodes are included on three sides of the standard latch rack, providing traceability at the rack level and providing readability to laboratories with or without barcode decoding equipment. The 2D barcode included on the bottom of the rack serves as both an orientation and identification feature for automated and benchtop storage equipment.

**Superior Storage Format.** Matrix 2D Barcoded ScrewTop storage tubes are available in specially designed, barcoded, stackable, microplate-footprint Latch Racks to save precious space in storage and on the bench top while maintaining traceability. Lid can be positioned to rest on the rack, preventing contamination during manual pipetting. Or remove lid completely for robotic handling.

**Flexibility.** Side-printed Matrix ScrewTop tubes and barcoded latch racks maintain compatibility with existing ScrewTop tube storage systems and accessories. ScrewTop Removal Tool caps/decaps tubes individually to enable one-handed pipetting. The Thermo Scientific ScrewTop Cap Tray can be used to cap/decap several tubes at once with automated capping systems or to fill tubes on an automated liquid handling platform, then cap an entire rack at once. Seven color cap options allow easy identification of samples at a glance.

**Stringent Quality Control.** Every 2D barcoded storage tube is scanned to ensure readability. All barcodes are checked against our database of previously assigned codes to prevent duplicates.

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## Product Specifications

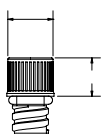
Tube Material	Virgin Class VI Medical Grade Polypropylene
Rack Material	Polycarbonate with acetal latches
Cap Material	Virgin Class VI Medical Grade Polypropylene with Santoprene™ gasket
ScrewTop Cap Tray Material	Acrylonitrile Butadiene Styrene (ABS)
Contaminant-free	All tubes and tray are supplied free from DNA, RNase, DNase and endotoxins
Autoclavable	Racked and unracked tubes are autoclavable with the caps loosened; ScrewTop trays are not autoclavable
2D Code	Non-proprietary, 12x12 Data-matrix with ECC200 Built-in Error Correction
Tube/Cap Temp Range	-196°C to 121°C; Autoclaving and boiling to vapor phase liquid nitrogen storage
Latch Rack Coding	2D Datamatrix; Linear EAN Code 128; Human Readable

Description	500 µl ScrewTop Storage Tubes		1.0 ml ScrewTop Storage Tubes	
Item Number	3743, 3744, 3745 3744-WP; 3744-WP1D; 3745-WP; 3745-WP1D		3740, 3741, 3742 3741-WP; 3741-WP1D; 3742-WP; 3742-WP1D	
Figure 1A: Tube Side View	Width (1A)	7.40±0.10 [0.290±0.002]	7.40±0.10 [0.290±0.002]	
	Height (1A)	30.60±0.20 [1.204±0.007]	44.00±0.10 [1.732±0.003]	
Figure 1B: Tube Side View w/ ScrewTop	Width (1B)	8.70±0.10 [0.344±0.003]	8.70±0.10 [0.344±0.003]	
	Height (1B)	39.20 [1.543]	52.60 [2.071]	
Figure 2: Rack Side View	Height (2A)	29.50±0.10 [1.160±0.005]	38.10±0.10 [1.500±0.005]	
	Height (2B)	29.10±0.10 [1.145±0.005]	42.50±0.20 [1.673±0.008]	
	Height (2C)	32.60±0.30 [1.282±0.012]	46.00±0.20 [1.809±0.008]	
	Height (2D)	41.30±0.40 [1.626±0.017]	54.60±0.30 [2.149±0.110]	
Figure 3: Rack Top View	Length	127.75±0.13 [5.029±0.005]	127.75±0.13 [5.029±0.005]	
	Width	85.46±0.13 [3.364±0.005]	85.46±0.13 [3.364±0.005]	
Figure 4: Stacked Rack View	Single Height (4A)	44.32±0.24 [1.745±0.010]	58.42±0.25 [2.300±0.010]	
	Incremental Height (4B)	43.31±0.25 [1.705±0.010]	57.30±0.25 [2.220±0.010]	
	Stacked Height (4C)	87.63±0.51 [3.450±0.020]	114.81±0.51 [4.520±0.020]	

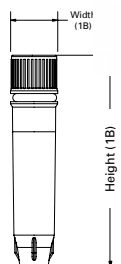
Description	Storage Tubes Barcoded Rack	
Item Number	3743-BR, 3744-BR, 3745-BR, 3744-WP-BR, 3744-WP1D-BR, 3745-WP-BR, 3745-WP1D-BR, 3740-BR, 3741-BR, 3742-BR, 3741-WP-BR, 3741-WP1D-BR, 3742-WP-BR, 3742-WP1D-BR, 3748-BR	
Figure 5: Rack Bottom View	Distance to barcode from short side (5A)	120.48 ± 0.254 [4.74 ± 0.010]
	Distance to barcode from short side (5B)	1.443 ± 0.203 [0.057 ± 0.008]
	Barcode length	5.83 ± 0.127 [0.230 ± 0.005]
	Distance to barcode from long side (5C)	71.98 ± 0.254 [2.834 ± 0.010]
	Distance to barcode from long side (5D)	8.18 ± 0.203 [0.322 ± 0.008]
	Barcode width	5.30 ± 0.127 [0.209 ± 0.005]

Description	ScrewTop Cap Tray	
Item Number	4906, 4477	
Figure 6: Tray Top View	Length	127.75±0.25 [5.03±0.010]
	Width	85.58±0.25 [3.37±0.010]
Figure 7: Stacked Tray View	Single Height (2A)	19.81±0.13 [0.78±0.005]
	Incremental Height (2B)	18.29±0.25 [0.72±0.010]
	Stacked Height (2C)	38.10±0.25 [1.50±0.010]

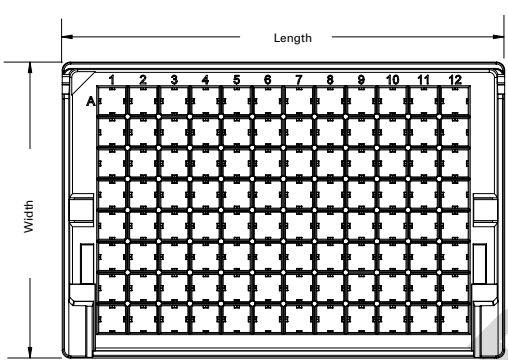
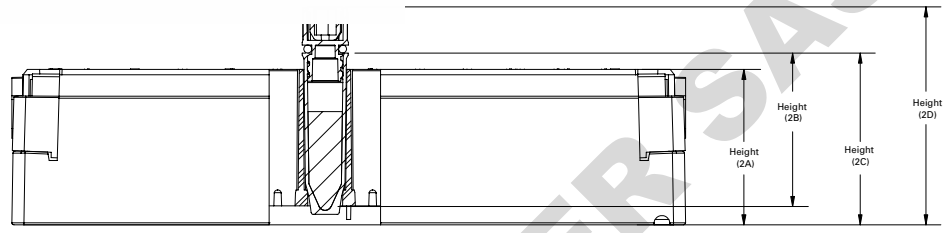




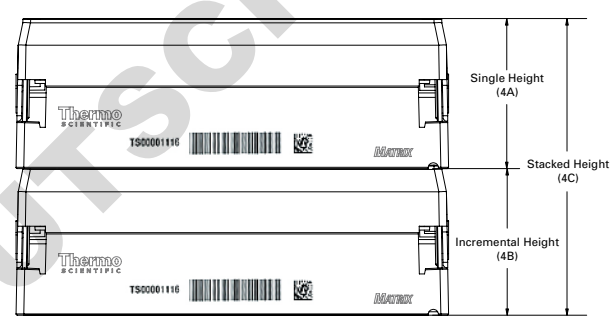
▲ Figure 1: Tube Side View



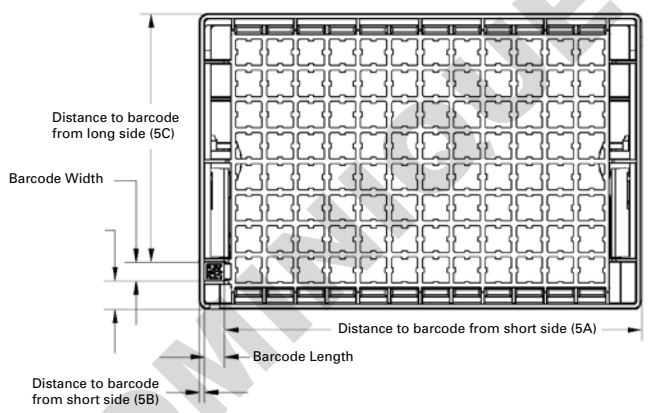
▲ Figure 2: Rack Side View



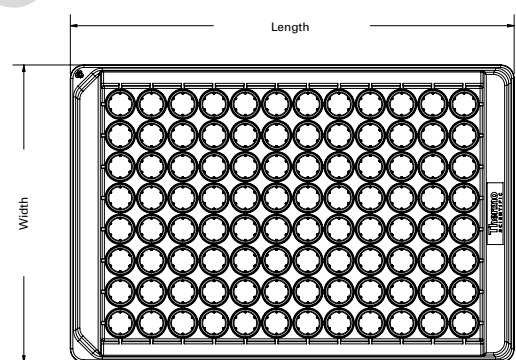
▲ Figure 3: Rack Top View



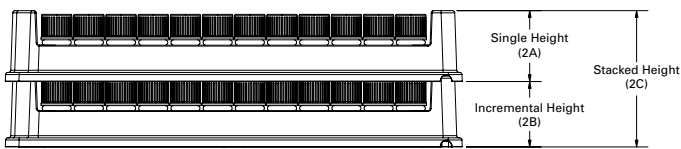
▲ Figure 4: Stacked Rack View



▲ Figure 5: Rack Bottom View



▲ Figure 6: Tray Top View



▲ Figure 7: Stacked Tray View

Cat. No. Non-Barcoded Rack	Cat. No. Barcoded Rack	Description	Max Working Volume, $\mu$ L	Cap Color	Qty	
3744	3744-BR	Tube, ScrewTop, 500 $\mu$ L 2D, V-Bottom	590	Colorless	5 racks of 96/case	Sterile
3744RED	3744RED-BR	Tube, ScrewTop, 500 $\mu$ L 2D, V-Bottom	590	Red	5 racks of 96/case	Sterile
3744YEL	3744YEL-BR	Tube, ScrewTop, 500 $\mu$ L 2D, V-Bottom	590	Yellow	5 racks of 96/case	Sterile
3744BLU	3744BLU-BR	Tube, ScrewTop, 500 $\mu$ L 2D, V-Bottom	590	Blue	5 racks of 96/case	Sterile
3744GRE	3744GRE-BR	Tube, ScrewTop, 500 $\mu$ L 2D, V-Bottom	590	Green	5 racks of 96/case	Sterile
3744WHI	3744WHI-BR	Tube, ScrewTop, 500 $\mu$ L 2D, V-Bottom	590	White	5 racks of 96/case	Sterile
3744PUR	3744PUR-BR	Tube, ScrewTop, 500 $\mu$ L 2D, V-Bottom	590	Purple	5 racks of 96/case	Sterile
3744AMB	3744AMB-BR	Amber Tube, ScrewTop, 500 $\mu$ L 2D, V-bottom	590		5 racks of 96/case	Sterile
3743AMB	3743AMB-BR	Amber Tube, ScrewTop, 500 $\mu$ L 2D, V-bottom	590	Red	5 racks of 96/case	Sterile
3745	3745-BR	Tube, ScrewTop, 500 $\mu$ L 2D, V-Bottom, No Caps	590		5 racks of 96/case	Sterile
3744-WP	3744-WP-BR	Tube, ScrewTop, 500 $\mu$ L 2D, WP, V-Bottom	590	Colorless	5 racks of 96/case	Sterile
3744-WP1D	3744-WP1D-BR	Tube, ScrewTop, 500 $\mu$ L 2D, WP/1D, V-Bottom	590	Colorless	5 racks of 96/case	Sterile
3745-WP	3745-WP-BR	Tube, ScrewTop, 500 $\mu$ L 2D, WP, V-Bottom, No caps	590		5 racks of 96/case	Sterile
3745-WP1D	3745-WP1D-BR	Tube, ScrewTop, 500 $\mu$ L 2D, WP/1D, V-Bottom, No caps	590		5 racks of 96/case	Sterile
3743		Tube, ScrewTop, 500 $\mu$ L 2D, V-Bottom	590	Colorless	Bulk, 480/case	Sterile
3743RED		Tube, ScrewTop, 500 $\mu$ L 2D, V-Bottom	590	Red	Bulk, 480/case	Sterile
3743YEL		Tube, ScrewTop, 500 $\mu$ L 2D, V-Bottom	590	Yellow	Bulk, 480/case	Sterile
3743BLU		Tube, ScrewTop, 500 $\mu$ L 2D, V-Bottom	590	Blue	Bulk, 480/case	Sterile
3743GRE		Tube, ScrewTop, 500 $\mu$ L 2D, V-Bottom	590	Green	Bulk, 480/case	Sterile
3743WHI		Tube, ScrewTop, 500 $\mu$ L 2D, V-Bottom	590	White	Bulk, 480/case	Sterile
3743PUR		Tube, ScrewTop, 500 $\mu$ L 2D, V-Bottom	590	Purple	Bulk, 480/case	Sterile
3741	3741-BR	Tube, ScrewTop, 1.0 mL 2D, V-Bottom	940	Colorless	5 racks of 96/case	Sterile
3741RED	3741RED-BR	Tube, ScrewTop, 1.0 mL 2D, V-Bottom	940	Red	5 racks of 96/case	Sterile
3741YEL	3741YEL-BR	Tube, ScrewTop, 1.0 mL 2D, V-Bottom	940	Yellow	5 racks of 96/case	Sterile
3741BLU	3741BLU-BR	Tube, ScrewTop, 1.0 mL 2D, V-Bottom	940	Blue	5 racks of 96/case	Sterile
3741GRE	3741GRE-BR	Tube, ScrewTop, 1.0 mL 2D, V-Bottom	940	Green	5 racks of 96/case	Sterile
3741WHI	3741WHI-BR	Tube, ScrewTop, 1.0 mL 2D, V-Bottom	940	White	5 racks of 96/case	Sterile
3741PUR	3741PUR-BR	Tube, ScrewTop, 1.0 mL 2D, V-Bottom	940	Purple	5 racks of 96/case	Sterile
3741AMB	3741AMB-BR	Amber Tube, ScrewTop, 1.0mL 2D, V-Bottom	940	Red	5 racks of 96/case	Sterile
3742AMB	3742AMB-BR	Amber Tube, ScrewTop, 1.0mL 2D, V-Bottom	940		5 racks of 96/case	Sterile
3742	3742-BR	Tube, ScrewTop, 1.0 mL 2D, V-Bottom, No Caps	940		5 racks of 96/case	Sterile
3741-WP	3741-WP-BR	Tube, ScrewTop, 1.0 mL 2D, WP, V-Bottom	940	Colorless	5 racks of 96/case	Sterile
3741-WP1D	3741-WP1D-BR	Tube, ScrewTop, 1.0 mL 2D, WP/1D, V-Bottom	940	Colorless	5 racks of 96/case	Sterile
3742-WP	3742-WP-BR	Tube, ScrewTop, 1.0 mL 2D, WP, V-Bottom, No caps	940		5 racks of 96/case	Sterile
3742-WP1D	3742-WP1D-BR	Tube, ScrewTop, 1.0 mL 2D, WP/1D, V-Bottom, No caps	940		5 racks of 96/case	Sterile
3740		Tube, ScrewTop, 1.0 mL 2D, V-Bottom	940	Colorless	Bulk, 480/case	Sterile
3740RED		Tube, ScrewTop, 1.0 mL 2D, V-Bottom	940	Red	Bulk, 480/case	Sterile
3740YEL		Tube, ScrewTop, 1.0 mL 2D, V-Bottom	940	Yellow	Bulk, 480/case	Sterile
3740BLU		Tube, ScrewTop, 1.0 mL 2D, V-Bottom	940	Blue	Bulk, 480/case	Sterile
3740GRE		Tube, ScrewTop, 1.0 mL 2D, V-Bottom	940	Green	Bulk, 480/case	Sterile
3740WHI		Tube, ScrewTop, 1.0 mL 2D, V-Bottom	940	White	Bulk, 480/case	Sterile
3740PUR		Tube, ScrewTop, 1.0 mL 2D, V-Bottom	940	Purple	Bulk, 480/case	Sterile

## Sterile ScrewTop Tube Caps

Cat. No.	Description	Cap Color	Qty/Case	Cat. No.	Description	Cap Color	Qty/Case
4906	Tray, ScrewTop Cap, Empty		5 trays	4470	Caps, ScrewTop Tube	Colorless	Bulk, 500
4477	Tray, ScrewTop Cap	Colorless	5 trays of 96 caps	4470RED	Caps, ScrewTop Tube	Red	Bulk, 500
4477RED	Tray, ScrewTop Cap	Red	5 trays of 96 caps	4470YEL	Caps, ScrewTop Tube	Yellow	Bulk, 500
4477YEL	Tray, ScrewTop Cap	Yellow	5 trays of 96 caps	4470BLU	Caps, ScrewTop Tube	Blue	Bulk, 500
4477BLU	Tray, ScrewTop Cap	Blue	5 trays of 96 caps	4470GRE	Caps, ScrewTop Tube	Green	Bulk, 500
4477GRE	Tray, ScrewTop Cap	Green	5 trays of 96 caps	4470WHI	Caps, ScrewTop Tube	White	Bulk, 500
4477WHI	Tray, ScrewTop Cap	White	5 trays of 96 caps	4470PUR	Caps, ScrewTop Tube	Purple	Bulk, 500
4477PUR	Tray, ScrewTop Cap	Purple	5 trays of 96 caps				

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