

Innovations for Life Science
Since 1990



#### **Innovations for Life Science**

For 30 years, Scientific Specialties has focused on bringing innovative, high-quality plasticware to life science. Our founder and CEO is a Ph.D. Biochemist who understands the specific needs and challenges of laboratory research and incorporates that knowledge into products that make your work easier and more successful.

Because of our commitment to innovation and quality, laboratories around the world have come to rely on our plastic consumables for everyday research as well as ground-breaking discoveries.



Made in USA

Every product in this catalog is proudly manufactured in the USA.



#### **Purity Assured**

Products are certified free of detectable RNase DNase, DNA, PCR inhibitors, and tested pyrogen-free. Sterile product is certified pyrogen-free.



Recyclable

Product is fully compliant with recycling standards.



**Autoclavable** 

Where specified, products may be sterilized at 121°C and 15 psi for 15 minutes.



Scientific Specialties, Inc. Lodi, CA USA

#### **Competence**

Our processes are controlled under a certified ISO-9001 quality assurance system. From the initial concept of a product to its finished form, we control all aspects of the design, production and quality in our state-of-the-art manufacturing facility, located in Lodi, California. We are one of the few producers of laboratory plastics still manufacturing in the USA—an important distinction between SSIbio and other brands.

#### **Excellence**

All products are manufactured in our 11,300 square-meter (122,000 square-foot) facility. This includes 3,700 square meters of dedicated clean, climate-controlled industrial space—of which, 1,500 square meters will be formally certified to ISO 8 / Class 100,000 standards. This ensures that all production and packaging are performed in an environment that meets rigid cleanroom specifications.

Quality injection molding, coupled with the integration of robotics, and our rigorous QA/QC processes demonstrate our commitment to excellence and guarantee product that is uniform, pure, and worthy of your trust.

#### **Partnership**

At Scientific Specialties, we know that having a reliable partner is important to our success. That is why we have built a business on also being the right partner to our customers. As a privately-held entity, we are able to make decisions and invest in equipment and other innovations to be more productive and responsive to the needs of our customers.

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# An Experienced Manufacturing Partner You Can Trust

Consistently producing high-quality products for 30 years is no accident. Since our founding, we have been driven by a desire to produce products that make research easier. Because of our commitment to innovation and excellence, laboratories around the world have come to rely on our plastic consumables for their everyday research as well as ground-breaking discoveries.

#### Innovation

**Eight design patents** attest to our passion for innovation and are incorporated in daily-use laboratory products that enhance or simplify user experience.

Triple-Interwell Linkages and Angled Caps revolutionized strip tubes, resulting in less spillage and more research.

#### **Purity & Clarity**

Our commitment to high-quality plastics has made us a leader in PCR consumables where optical clarity and purity are critical, and is evident in all of our other products as well. You can be assured that every consumable product you purchase from SSIbio will be free of detectable DNase, RNase, DNA, and PCR inhibitors and, for those products which are sterile, we employ E-beam sterilization to eliminate pyrogens and ensure absolute purity.

# Quality

All products are required to pass rigorous laboratory testing before sale. A Certificate of Conformity and Analysis is available that defines the testing protocols followed. This is your guarantee of quality and satisfaction.





All processes—from design to production and packaging—are controlled under a certified ISO-9001:2015 Quality
Assurance system. Select product also conforms to CE
Council Directives 93/42/EEC and 98/79/EEC.

Pipette tip grid with lock mechanism simplified easy reloading of empty racks.

Press-to-Open Rack Lid enabled easy one-handed operation.

## **Expertise**

Significant investment in automation ensures uniform product and eliminates the risk of human-borne

contamination.

The use of automated inline robotics, vacuum testing, and optical inspection identifies and eliminates non-conforming product.

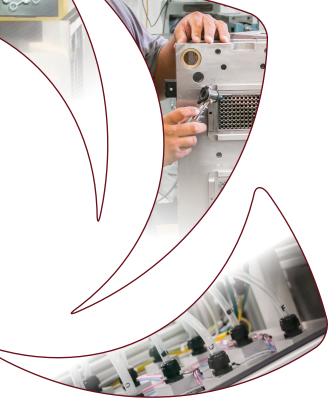
#### **Control**

**Every production lot is quality tested** for physical and chemical compliance to rigorous standards in our well-equipped, state-of-the-art quality assurance laboratory.



All shipments include the manufacturing lot number so that, in the unlikely event of a problem, the code can be traced back to the exact production date and the very mold that was used to produce the part to identify root cause.

Our molds, made from the finest stainless steel, are designed for long-term performance. Regular, in-house maintenance ensures reliable production and dependable lead times.



**Injection molding expertise and in-house craftsmanship** ensure reliable machine performance to produce consistent parts.

**Cleanroom Production** to Class 100,000 Standards

All products are manufactured in our 11,300 square-meter (122,000 square-foot) facility.





# The UltraFlux Story

UltraFlux® PCR Consumables have been a laboratory staple around the world for more than 25 years. Beginning with a patent granted for the design of SnapStrip® tubes with angularly attached caps, the UltraFlux line has been continuously innovated and improved over the past two decades to provide reliable results and tremendous value.

#### Advantages of UltraFlux and SnapStrip Tubes:

#### **Angular Cap Attachment** -

 Angularly attached caps on UltraFlux® i and SnapStrip® tubes prevent cap lids and hinges from interfering with each other, allowing for easier operation in an SBS format rack.

#### **Ultra-Thin Walls** —

 Ultra-thin walls ensure efficient thermal transfer and maximum yield, yet are strong enough to prevent crushing.

#### **Tube Color and Clarity -**

- Clear tubes provide high clarity for visualizing contents.
- White tubes are available with optically-clear caps, thanks
  to proprietary two-material manufacturing. The white wells
  offer enhanced fluorescence reflection and the opticallyclear caps ensure that the fluorescence signal is passed
  through uninhibited, creating the perfect environment for
  consistent and reliable qPCR performance.

Optically-clear caps ensure that the fluorescence signal is passed through uninhibited.

White tubes offer enhanced fluorescence reflection.



Unique two-material manufacturing creates the perfect environment for consistent, reliable qPCR performance.

#### **UltraFlux i Strip Tubes**





**SnapStrip** single interwell linkage makes strips easy to split into smaller sections.

# **UltraFlux PCR Strip Tubes & Strip Caps**

#### UltraFlux® i

- Robust interwell linkages make the strips rigid and easy to handle, preventing spills.
- Angularly attached caps prevent lids and hinges from interfering with each other, allowing for easier operation in an SBS format rack.
- Unique two-material white tubes with optically-clear flat caps create the perfect environment for consistent, reliable qPCR performance. White wells offer enhanced fluorescence reflection and optically-clear caps ensure that the fluorescence signal is uninhibited.
- Colored tubes offer easy organization. Dual-colored with optically-clear flat caps to ensure that the fluorescence signal is uninhibited for optimum qPCR performance.
- Certified free of detectable RNase, DNase, DNA, PCR inhibitors, and tested pyrogen-free.

Item #	Tube Description	Cap Description	Tube Colors	Packaging
3247-00	0.2 mL Strip of 8	Flat, Optically-Clear	-00, -01, -02, -04, -05, -06, -09, -40	120 strips/unit, 10 units/case
3248-00	0.1 mL Low Profile*, Strip of 8	Flat, Optically-Clear	-00, -40	120 strips/unit, 10 units/case

<sup>\*</sup>Fast® Cycler and Lightcycler® compatible.

#### **SnapStrip®**

- Customizable strips easily split into smaller sections.
- Angularly attached caps prevent lids and hinges from interfering with each other, allowing for easier operation in an SBS format rack.
- Certified free of detectable RNase, DNase, DNA, PCR inhibitors, and tested pyrogen-free.

Item #	Tube Size	Cap Description	Tube Colors	Packaging
3240-00	0.2 mL Strip of 8	Dome, Clear	-00, -01, -02, -04, -05, -06, -09	120 strips/unit, 10 units/case
3245-00	0.2 mL Strip of 8	Flat, Optically-Clear	-00 Clear	120 strips/unit, 10 units/case
3246-00	0.1 mL Low-Profile	Flat, Optically-Clear	-00 Clear	120 strips/unit, 10 units/case

#### UltraFlux® z

- Strips of hinged attached caps prevent accidents common with separate caps.
- Optically-clear, flat caps for qPCR.
- Uniform thin walls.
- Certified free of detectable RNase, DNase, DNA, PCR inhibitors, and tested pyrogen-free.

Item #	Tube Size	Cap Description	Tube Colors	Packaging
3235-00	0.2 mL Strip of 8	Flat, Optically-Clear	-00, -01, -02, -04, -05, -06, -09, -40	125 strips/unit, 10 units/case
3230-00	0.2 mL Strip of 8	Dome, Clear	-00 Clear	125 strips/unit, 10 units/case

#### Colors:

-00 - Clear
 -01 - Blue
 -06 - Yellow
 -02 - Green
 -09 - Assorted
 -04 - Red
 -40 - White

**Assorted Colors:** Item #s ending in -09 include an assortment of 5 colors: blue, green, red, violet, yellow.













# 3113-00









# **UltraFlux PCR Strip Tubes & Strip Caps**

#### **Strip Tubes**

Item #	Tube Size	Strip Description	Colors	Packaging
3111-00	0.2 mL	Strips of 8 Tubes	-00, -01, -02, -04, -05, -06, -09 <sup>1</sup> , -40	125 strips/unit, 10 units/case
3140-00	0.1 mL <sup>2</sup>	Strips of 8 Tubes	-00, -40	125 strips/unit, 10 units/case
3113-00	0.2 mL	Strips of 12 Tubes	-00, -01, -02, -04, -05, -06, -09 <sup>1</sup> , -40	80 strips/unit, 10 units/case

<sup>1</sup>Assorted colors are individually packed with 2 bags per color, 10 total bags per unit.  $^2\text{Fast}^{\$}$  Cycler and Lightcycler  $^{\$}$  compatible.

#### **Strip Caps** (Strip caps also fit UltraFlux PCR plates.)

Item #	Caps	Strip Description	Colors	Packaging
3105-00	Flat	Strips of 8 Caps	-00 Clear	125 strips/unit, 10 units/case
3102-00	Dome	Strips of 8 Caps	-00, -01, -02, -04, -05, -06, -09	125 strips/unit, 10 units/case
3106-00	Flat	Strips of 12 Caps	-00 Clear	80 strips/unit, 10 units/case
3103-00	Dome	Strips of 12 Caps	-00, -01, -02, -04, -05, -06, -09	80 strips/unit, 10 units/case

#### **Combination Packs: Strip Tubes with Strip Caps**

Item #	Tube Size	Description	Colors	Packaging
3135-00	0.2 mL	8-Strip Tubes & Clear, Flat Caps	-00, -40	125 strips/unit, 10 units/case
3132-00	0.2 mL	8-Strip Tubes & Clear, Dome Caps	-00 Clear	125 strips/unit, 10 units/case
3145-00	0.1 mL	8-Strip Tubes & Clear, Flat Caps	-00, -40	125 strips/unit, 10 units/case
3136-00	0.2 mL	12-Strip Tubes & Clear, Flat Caps	-00 Clear	80 strips/unit, 10 units/case
3133-00	0.2 mL	12-Strip Tubes & Clear, Dome Caps	-00 Clear	80 strips/unit, 10 units/case



-06 - Yellow

Assorted Colors: Item #s ending in -09 include an assortment of 5 colors:

-02 - Green
 -09 - Assorted

• -00 - Clear • -05 - Violet

● -04 - Red ○ -40 - White

-06 - Yellow

Colors:

-01 - Blue

blue, green, red, violet, yellow.



#### **UltraFlux PCR Tubes**

#### **Individual PCR Tubes**

- Individual PCR tubes feature evaporation-resistant, easy-to-open-and-close lids that prevent sample loss.
- Ultra-thin, uniform wells ensure optimal heat transfer and reaction efficiency.
- Conveniently packaged in reclosable bags to minimize risk of contamination.
- Available in ultra-clear, assorted, or specific colors.
- Certified free of detectable RNase, DNase, DNA, PCR inhibitors, and tested pyrogen-free.

Item #	Tube Size	Cap Description Tube & Cap Colors		Packaging
3110-00	0.2 mL	Capless	-00 Clear	1000/unit, 10 units/case
3210-00	0.2 mL	Dome Cap	-00, -01, -02, -04, -05, -06, -09	1000/unit, 10 units/case
3220-00	0.2 mL	Frosted Flat Cap	-00, -01, -02, -04, -05, -06, -09	1000/unit, 10 units/case
3225-00	0.2 mL	Clear Flat Cap	-00 Clear	1000/unit, 10 units/case
3310-00	0.5 mL	Dome Cap	-00 Clear	1000/unit, 10 units/case
3320-00	0.5 mL	Frosted Flat Cap	-00, -01, -02, -04, -05, -06, -09	1000/unit, 10 units/case



#### Colors:

- -00 Clear -05 Violet
- -01 Blue -06 Yellow
- -02 Green -09 Assorted
- -04 Red

**Assorted Colors:** Item #s ending in -09 include an assortment of 5 colors: blue, green, red, violet, yellow.

#### **Corbett-Type Strip Tubes and Caps**

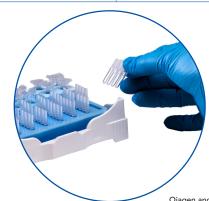
- Compatible with QIAGEN®/Corbett Rotor-Gene® Instruments.
- Certified free of detectable RNase, DNase, DNA, PCR inhibitors, and tested pyrogen-free.

Item #	Tube Size	Description	Colors	Packaging
3188-00	0.1 mL	4 Tube Strip and 4 Cap Strip	-00 Clear	250 strips/unit, 10 units/case



#### See page 40 for IsoFreeze qPCR.

A specially-designed rack for Corbett-Type strip tubes and individual 0.2 and 0.5 mL PCR tubes.

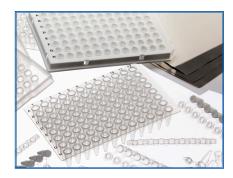




Qiagen and Rotor-Gene are registered trademarks of the Qiagen Group.

#### **UltraFlux PCR Plates**

UltraFlux® PCR Plates are available in a wide variety of styles to fit most thermal cyclers on the market. Each is designed to meet or exceed the specifications and performance of plates supplied by the original equipment manufacturer.



#### **Advantages of UltraFlux Plates:**

#### Broad compatibility with popular thermal cyclers

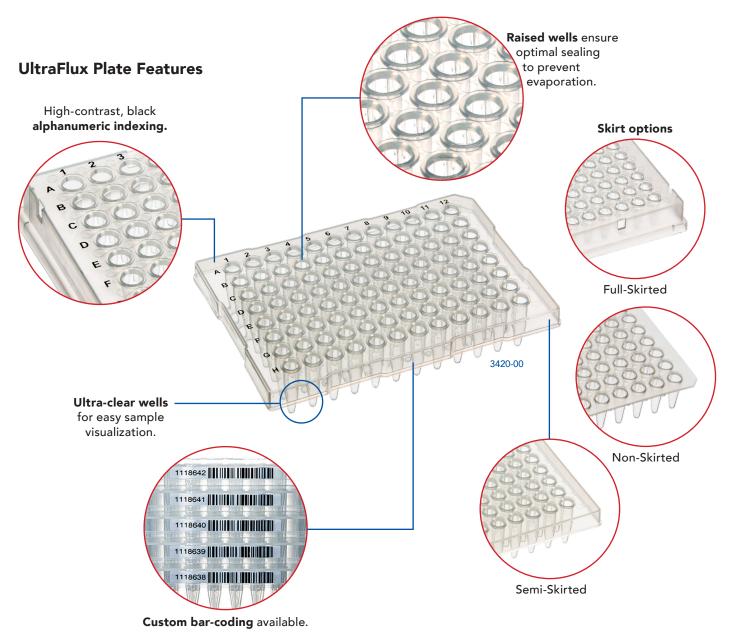
• Online plate selector guide makes it quick and easy to find your ideal plate.

#### Ultra-thin, uniform wells

• Optimal heat transfer and higher reaction efficiency.

#### A variety of plate sealing options

• Film, foil, silicone mats, and strip caps prevent evaporation.



#### **UltraFlux PCR Plates**

Broad thermal cycler compatibility.

**Non-Skirted Plates** 

ltem#

3400-00

3400C00

3401-00

3410-00

# of

Wells

96

96

96

96

Well

Volume

0.2 mL

0.2 mL

0.1 mL

0.2 mL

- High-contrast, black alphanumeric indexing for easy well identification.
- Crystal-clear wells to easily verify sample volume.
- Ultra-thin, uniform wells ensure optimal heat transfer for high reaction efficiency.
- Well ridges reduce sample evaporation when sealing with film, foil, or strip caps.
- Bar-coded semi-skirted and full-skirted plates available.
- Manufactured from high-clarity, ultra-pure polypropylene (meets FDA 21 CFR 177.1520 & USP Class VI).

Type

Standard

Low Profile

Standard, Cuttable

Chimney Top, Standard

- Non-skirted item 3410-00 is also available in 24 and 48 well size options. Please inquire for more details.
- Certified free of detectable DNase, RNase, DNA, PCR inhibitors, and tested pyrogen-free.

**Corner Color** 

A12

A12

H12

H12

-00, -01, -02,

-04, -05, -06,

-09, -40

-00 Clear

-00, -40

-00, -01, -02,

-04, -05, -06,

**Packaging** 

10/unit,

10 units/case

10/unit,

10 units/case

20/unit,

5 units/case

10/unit,

10 units/case







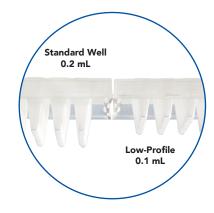




# **Compatibility Quick Reference**

	0.1 mL Lo	w Profile	0.2 mL S	tandard	384-Well
Thermal Cycler	Strip Tube	Plate	Strip Tube	Plate	Plate
ABI®	3248-00	3426-00	3247-00	3425-00	3435-00
Bio-Rad®	3248-00	3441-00	3247-00	3450-00	3435-00
Roche LightCycler®	3248-40	3455-40			3430-40

LightCycler is a registered trademark of Roche Diagnostic, GmbH. ABI is a trademark of Applied Biosystems. Bio-Rad is a registered trademark of Bio-Rad Laboratories, Inc.



# Find the right plate for your thermal cycler!

#### **Online PCR Plate & Tube Selector**

Scan this QR code to use the online Plate & Tube Selector Guide or go to:

http://www.SSIbio.com/pcr-plate-and-tube-selector



# 3420-00 3421-00





# Best Seller! 3450-00







# **UltraFlux PCR Plates**

#### **Semi-Skirted Plates**

Item #	Bar-Coded Item #	# of Wells	Well Volume	Туре	Corner	Colors	Packaging
3420-00	3420T00 <sup>1</sup>	96	0.2 mL	ABI®-Type	A12	-00, -01, -02, -04, -05, -06, -09, -40	
3421-00	n/a	96	0.1 mL	Low-Profile, ABI®-Type	A12	-00 Clear	
3425-00	3425T00 <sup>1</sup>	96	0.2 mL	Raised Rim, ABI®-Type	A12	-00, -01, -02, -04, -05, -06, -09, -40	10/unit,
3426-00	n/a	96	0.1 mL	Low-Profile, FAST®-Type	A1	-00, -40	10 units/case
3450-00	3450T00 <sup>1</sup>	96	0.2 mL	Straight Side	A12	-00,-01, -02, -04, -05, -06, -09, -40	
3455-00	3455T40 <sup>2</sup>	96	0.1 mL	Low-Profile, LightCycler®- Type, White	H12	-00, -40	

 $<sup>^{1}</sup>$ Available only in -00 Clear and -40 White.  $^{2}$ Available only in -40 White.

#### **Full-Skirted Plates**

Item #	Bar-Coded Item #	# of Wells	Well Volume	Туре	Corner	Colors	Packaging
3441-00	3441T00¹	96	0.1 mL	Low-Profile	A12	-00, -01, -02, -04, -05, -06, -09, -40	
3430-00	3430T00¹	384	30 µL	Roche-Type, Two-Notch	A24 & P24	-00, -40	10/unit, 10 units/case
3435-00	n/a	384	30 µL	ABI-Type, One-Notch	A24	-00, -40	

<sup>&</sup>lt;sup>1</sup>Available only in -00 Clear and -40 White.



#### Colors:

-00 - Clear
 -05 - Violet
 -01 - Blue
 -06 - Yellow
 -02 - Green
 -09 - Assorted

● -04 - Red ○ -40 - White

**Assorted Colors:** Item #s ending in -09 include an assortment of 5 colors: blue, green, red, violet, yellow.

LightCycler is a registered trademark of Roche Diagnostic, GmbH. Fast is a trademark of Applied Biosystems.

3435-00

# **UltraFlux PCR Plate Sealing**

- 8-strip and 12-strip caps are ideal for sealing specific sections of plates.
- Sealing mats, film, and foil enhance full-plate sealing and analysis.
- Create an evaporation-resistant seal to minimize sample loss.
- All options are certified free of detectable RNase, DNase, DNA, and PCR inhibitors.
- Films and foils feature perforated end tabs for easy application and simple removable.

#### **UltraFlux® PCR Film**

- The perfect choice for endpoint PCR work.
- Made from clear polypropylene, with an acrylic adhesive.
- Temperature range: -40°C to +120°C.

#### UltraFlux® RT Film

- Ultra-clear, polyester film with maximum clarity for optical analysis during qPCR.
- Most cost efficient option for real-time PCR plate sealing.
- Medical-grade adhesive goes on smoothly and is non-absorbing and non-fluorescing.
- Temperature range: -40 °C to +120 °C.

#### **UltraFlux® RT Pressure-Released Film**

- Clear, polyolefin film with a strong silicone adhesive for an evaporation-resistant seal.
- Adhesive remains inert until pressed against the plate surface, leaving the well area free of residue.
- Temperature range: -70 °C to +100 °C.

#### **UltraFlux® Foil**

- Pierceable.
- Soft and malleable—easily conforms to the rim of the well for a secure seal.
- Temperature range: -80°C to +120°C.

#### **Sealing Film and Foil**

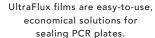
#### Other options available. Please inquire.

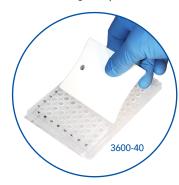
Item #	Seal Type	Dimensions	Packaging	
3622-00	UltraFlux Standard PCR Film	135.1 x 79.4 mm	100 sheets/case	
3622-00-00500		(123.1 without Tabs)	100 sheets/case, 5 cases/carton	
3612-00	UltraFlux RT Film	142.9 x 79.4 mm	100 sheets/case	
3612-00-00500		(121.9 without Tabs)	100 sheets/case, 5 cases/carton	
3651-00	UltraFlux RT Pressure-	139.7 x 78.6 mm	100 sheets/case	
3651-00-00500	Released Film	(113.0 without Tabs)	100 sheets/case, 5 cases/carton	
3640-00	UltraFlux Foil	146.1 x 82.6 mm	100 sheets/case	
3640-00-00500		(125.4 without Tabs)	100 sheets/case, 5 cases/carton	
3640-S0*	UltraFlux Foil, Sterile	146.1 x 82.6 mm	50 sheets/case	
3640-S0-00500*		(125.4 without Tabs)	50 sheets/case, 5 cases/carton	
3600-40	UltraFlux Applicator	For a Smooth, Secure Seal	100 applicators/case	

\*Sterile product is certified pyrogen-free.

#### Reusable, Pierceable Sealing Mat

Item #	Description	Material	Dimensions	Packaging
3510-00	96-Well Sealing Mat	Silicone	Total Length of 4.67" Total Width of 2.90"	5/unit, 10 units/case

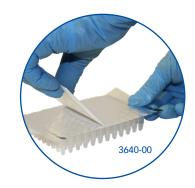






UltraFlux strip caps are an excellent option for plate sealing. See page 8.







3510-00



# The Peak of Pipetting

# The Highest Level of Liquid Handling Control

Vertex® Pipette Tips were meticulously designed using a proprietary resin that provides researchers with exceptional liquid handling performance. Even the Vertex Value tip range outperforms competitive tips in the areas of release and retention. Plus, thinner walls and finely tapered ends prevent the need to touch-off when pipetting the last drop.

#### With Vertex Pipette Tips, Less Is More!

- Less fluid retention
- · Less sample loss
- Less time spent
- Less plastic wasted



#### **Clean Liquid Release**

Vertex tips deliver a much cleaner liquid release, dispensing all of the sample and improving pipetting accuracy. Users will maintain complete fluid control, even when working with smaller volumes, while not compromising the accuracy and precision of their pipetting.

#### **Low Retention**

All Vertex tips are designed to be naturally low-binding, but tips with NoStick® resin are considerably more hydrophobic than standard tips, enabling even viscous fluids to be dispensed more completely.



The NoStick symbol indicates products that are made with proprietary resin technology to facilitate exceptionally clean release.

#### Filtered Tips

Vertex Filtered Pipette Tips offer an extra level of protection, confidence, and control by providing a barrier between the nose cone of the pipettor and the sample.

#### Advantages of the Vertex Filter Membrane:

- Manufactured from high-density, inert polyethylene (HDPE).
- Contains no additives that can contaminate samples if encountered.
- Provides a barrier against contamination, but will not impede airflow.
- Hydrophobic properties prevent absorption of samples.



Less is more!

# Vertex® EcoPac® Refill Systems



Vertex EcoPac® Refill Systems provide handy lift-and-load simplicity, and do not require any tools or special instructions to move from an empty insert to a fresh set of 96 tips. EcoPac Refill Systems are also environmentally friendly, reducing lab waste by 70%, while also conserving precious shelf space.

#### Paper or Plastic? The choice is yours.

Vertex EcoPacs are available in paper and plastic packaging, to suit your application as well as your preferred recycling method.

#### **EcoPac Benchtop**

The EcoPac Benchtop Refill System is housed in paperboard packaging that may be preferred by some institutional recycling programs. Inside, you will find tip refills of the highest Vertex quality and low-retention technology.

#### **EcoPac Cleanroom**

The EcoPac Cleanroom Refill System is housed in clean and durable plastic (PET) packaging to protect the tips from damage and eliminate particulate matter.





EcoPac inserts are imprinted with tip size and lot number data, visible even when seated inside the rack.



#### The Vertex Rack

Vertex racks are made robust and designed to withstand multiple autoclave cycles.



Racks are labeled with volume and lot information for easy identification. Plastic labels are autoclavable and 100% recyclable.



Sterile racks and refills are preserved in an easy-to-open, zip-strip shrink wrap.

Patented, press-toopen rack technology enables easy onehanded operation while also remaining securely closed when not in use.



The Vertex rack was designed to facilitate offset pipetting and accommodate multichannel pipettors.

<sup>\*</sup> Only available in EcoPac Cleanroom, Sterile, Filtered Refills.

Filtered tips shown in actual size.

#### **Grid Colors**



**Red** 10 μL & 10 μL XL



**Yellow** 20, 100, 200 & 300 μL



**Blue** 1000 & 1250 μL

# **Vertex Pipette Tips with NoStick® Resin**



1250 μL

- High-clarity polypropylene meets FDA 21 CFR 177.1520 & USP Class VI.
- Proprietary NoStick resin technology facilitates clean release.
- Filtered tips have a hydrophobic HDPE barrier that won't contaminate or impede airflow.
- EcoPac Reload Systems provide a cost-effective, eco-friendly alternative to storing racked product.

• Certified free of detectable RNase, DNase, DNA, PCR inhibitors, and tested pyrogen-free. Sterile product is certified pyrogen-free.



#### Graduations

**10 μL:** 2 & 10 μL **10 μL XL:** 1, 2, & 10 μL **20 μL:** 10 μL

**100 μL:** 10, 50, & 100 μL



**200 μL:** 10, 50, & 100 μL **300 μL:** 10, 50, 100, & 200 μL **1000 μL:** 100, 500, & 1000 μL **1250 μL:** 100, 500, & 1000 μL



#### Racked



Item #	Volume	Description	Packaging
4117N00		Racked	
4117NS0	10 μL	Racked, Sterile	
4117NSF		Racked, Sterile, Filtered	
4137N00		Racked	
4137NS0	10 μL XL	Racked, Sterile	
4137NSF		Racked, Sterile, Filtered	
4237NAF	20 μL	Racked, Sterile, Filtered	96 tips/rack,
4237NBF	100 μL	Racked, Sterile, Filtered	10 racks/unit, 5 units/case
4237N00		Racked	
4237NS0	200 μL	Racked, Sterile	
4237NSF		Racked, Sterile, Filtered	
4927N00		Racked	
4927NS0	300 µL	Racked, Sterile	
4927NSF		Racked, Sterile, Filtered	
4337N00		Racked	
4337NS0	1000 μL	Racked, Sterile	
4337NSF		Racked, Sterile, Filtered	96 tips/rack,
4347N00		Racked	10 racks/unit, 4 units/case
4347NS0	1250 µL	Racked, Sterile	

Racked, Sterile, Filtered







4347NSF

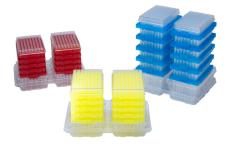
# EcoPac Cleanroom





Item #	Volume	Description	Packaging <sup>1</sup>
4118N00		EcoPac Cleanroom	10 refill inserts/unit, 10 units/case
4118NSF	10 μL	EcoPac Cleanroom, Sterile, Filtered	2 refill inserts/unit, 25 units/case
4138N00	10 1 21	EcoPac Cleanroom	10 refill inserts/unit, 10 units/case
4138NSF	10 μL XL	EcoPac Cleanroom, Sterile, Filtered	2 refill inserts/unit, 25 units/case
4238NAF	20 μL	EcoPac Cleanroom, Sterile, Filtered	2 refill inserts/unit, 25 units/case
4238NBF	100 µL	EcoPac Cleanroom, Sterile, Filtered	2 refill inserts/unit, 25 units/case
4238N00	200 1	EcoPac Cleanroom	10 refill inserts/unit, 10 units/case
4238NSF	200 μL	EcoPac Cleanroom, Sterile, Filtered	2 refill inserts/unit, 25 units/case
4928N00	200 1	EcoPac Cleanroom	10 refill inserts/unit, 10 units/case
4928NSF	300 μL	EcoPac Cleanroom, Sterile, Filtered	2 refill inserts/unit, 25 units/case
4338NSF	1000 μL	EcoPac Cleanroom, Sterile, Filtered	2 refill inserts/unit, 15 units/case
4348N00	1250	EcoPac Cleanroom	10 refill inserts/unit, 5 units/case
4348NSF	1250 μL	EcoPac Cleanroom, Sterile, Filtered	2 refill inserts/unit, 15 units/case





<sup>1</sup>EcoPac Refill Inserts contain 96 tips each.

# EcoPac Benchtop





Item #	Volume	Description	Packaging <sup>1</sup>
4115N00	10 μL	EcoPac Benchtop	
4135N00	10 μL XL	EcoPac Benchtop	10 refill inserts/unit,
4235N00	200 μL	EcoPac Benchtop	10 units/case
4925N00	300 μL	EcoPac Benchtop	
4345N00	1250 µL	EcoPac Benchtop	8 refill inserts/unit, 5 units/case



# Bulk 🔗



Item #	Bulk Filtered Item #	Volume	Description	Packaging
4110N00	4110N0F	10 μL	10 μL Bulk	
4130N00	4130N0F	10 μL XL	10 μL XL Bulk	
4230N00	4230N0F	200 μL	200 μL Bulk	
	4230NAF	20 μL	20 μL Bulk, Filtered	1000 tips/unit,
	4230NBF	100 μL	100 μL Bulk, Filtered	10 units/case (4230N00: 20 units/case)
4920N00		300 µL	300 μL Bulk	
4330N00	4330N0F	1000 μL	1000 μL Bulk	
4340N00		1250 µL	1250 μL Bulk	





NoStick proprietary, low-retention resin technology.



Eco-friendly refill system

# **Pipette Tips**

Value Tips

Tips shown in actual size.









# **Vertex Value Pipette Tips**

Vertex Value Tips are suitable for applications or samples that do not require the ultra-low retention properties of tips made with NoStick® resin.

- Universal fit to accommodate most pipettor brands.
- Available in racks, reloads, and bulk.
- Manufactured from virgin polypropylene to ensure purity and provide excellent optical clarity.
- Certified free of detectable RNase, DNase, DNA, PCR inhibitors, and tested pyrogen-free. Sterile product is certified pyrogen-free.

Item #	Volume	Description	Colors	Packaging	
4110-00	10 μL	Gilson-Fit, Bulk	ulk Clear		
4130-00	10 μL XL	Bulk	Clear	10 units/case	
4220-00	200 μL	Bulk	Clear	1000 tips/unit,	
4220-06	200 μL	Bulk	Yellow	20 units/case	
4227-00	200 μL	Racked	Clear		
4227-06	200 μL	Racked	Yellow	96 tips/rack, 10 racks/unit,	
4227-S0	200 μL	Racked, Sterile	Clear	5 units/case	
4227-S6	200 μL	Racked, Sterile	Yellow		
4228-00	200 μL	EcoPac Cleanroom	Clear	96 tips/refill insert, 10 refill inserts/unit.	
4228-06	200 μL	EcoPac Cleanroom	Yellow	10 units/case	
4330-01	1000 μL	Bulk	Blue	1000 tips/unit, 10 units/ case	
4337-01	1000 μL	Racked	Blue	96 tips/rack,	
4337-S1	1000 µL	Racked, Sterile	Blue	10 racks/unit, 4 units/case	



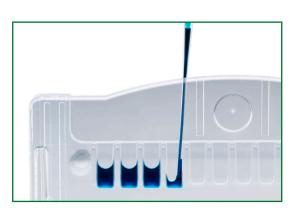
Tips shown in actual size.

# **Vertex-GL Gel-Loading Tips**

Vertex-GL Gel-Loading Pipette Tips are designed for precise and accurate sample loading into gels.

- Round or flat tip options to meet all customer preferences.
- Patented press-to-open racks provide easy, one-handed opening.
- Universal fit to accommodate most pipettor brands.
- Multichannel-friendly with a standard 96-tip arrangement.
- Small pack sizes—preferred by more researchers.
- Certified free of detectable RNase, DNase, DNA, PCR inhibitors, and tested pyrogen-free. Sterile product is certified pyrogen-free.

Item #	Volume	Description	Outer Diameter	Tip Length	Packaging
4817-00 4817-S0	10 μL	Round Tip, Racked Round Tip, Racked, Sterile	0.57 mm	52 mm	
4817-0A 4817-SA	10 μL	Flat Tip, Racked Flat Tip, Racked, Sterile	0.37 mm	52 mm	
4817-0B 4817-SB	10 μL	Flat Tip, Racked Flat Tip, Racked, Sterile	0.17 mm	52 mm	
4817-SF	10 μL	Round Tip, Filtered, Racked, Sterile	0.57 mm	52 mm	
4847-AF	20 μL	Round Tip, Filtered, MBP-Type, Racked, Sterile	0.57 mm	68 mm	96 tips/rack,
4847-BF	100 μL	Round Tip, Filtered, MBP-Type, Racked, Sterile	0.57 mm	68 mm	2 racks/unit, 5 units/case
4837-00 4837-S0	200 μL	Round Tip, Racked Round Tip, Racked, Sterile	0.57 mm	83 mm	
4837-0A 4837-SA	200 μL	Flat Tip, Racked Flat Tip, Racked, Sterile	0.37 mm	83 mm	
4837-0B 4837-SB	200 μL	Flat Tip, Racked Flat Tip, Racked, Sterile	0.17 mm	83 mm	
4847-00 4847-S0	200 μL	Round Tip, MBP-Type, Racked Round Tip, MBP-Type, Racked, Sterile	0.57 mm	68 mm	
4840-00	200 μL	Round Tip, MBP-Type, Bulk	0.57 mm	68 mm	1000 tips/bag, 10 bags/case







Tips not shown: **10 μL** 4817-0B, 4817-SB





Tips not shown: **200 μL** 4837-0B, 4837-SB

MBP is a registered trademark of Thermo Fisher Scientific.

#### **Pipette Tips** Multi-Volume XI

Tips shown in actual size.





# Multi-Volume XL Pipette Tips (



- Extended length (91 mm / 3.58 inch) to easily reach the bottom of  $12 \times 75$  mm tubes without risking contamination to the pipettor nose cone.
- Compatible with 20, 100, and 200 µL pipettors (and 300 µL non-filtered).
- Filter placement is optimized to accommodate 20, 100, and 200 µL pipettors; non-filtered tips are also compatible with 300 µL pipettors eliminating the need to keep multiple tips in inventory.
- Universal fit for compatibility with most major pipettor brands.
- Vertex NoStick® resin technology creates a low-binding surface for maximum sample recovery.
- Graduations at 10, 50, 100, 150, and 200  $\mu$ L.
- 96-tip format in a hinged, locking rack that easily accommodates multi-channel pipettors.
- Certified free of detectable RNase, DNase, DNA, PCR inhibitors, and tested pyrogen-free. Sterile product is certified pyrogen-free.

Item #	Max Volume	Description	Colors	Packaging
4280N00	300 µL	Multi-Volume XL, Bulk	Natural	1000 tips/unit, 10 units/case
4287N00	300 µL	Multi-Volume XL, Racked	Natural	96 tips/rack, 2 racks/unit, 5 units/case
4287NS0	300 µL	Multi-Volume XL, Racked, Sterile	Natural	96 tips/rack, 2 racks/unit, 5 units/case
4287NSF	200 μL	Multi-Volume XL, Racked, Sterile, Filtered	Natural	96 tips/rack, 2 racks/unit, 5 units/case







Registered trademarks on page 21: Eppendorf is a registered trademark of Eppendorf AG. Socorex is a registered trademark of Socorex Isba, S.A. Gilson is a registered trademark of Gilson, Inc. Finnpipette (Finn) is a registered trademark of Thermo Fisher Scientific.

Tips shown in actual size.

#### Large Orifice & Macro Tips

# **Wide Bore Tips**

- Larger opening prevents cell fragmentation due to shearing.
- Ideal for pipetting of macromolecules and viscous samples.
- Inside diameter at tip end is 0.06 inch (1.5 mm).
- Ideal for NGS protocol.
- Certified free of detectable RNase, DNase, DNA, PCR inhibitors, and tested pyrogen-free. Sterile product is certified pyrogen-free.

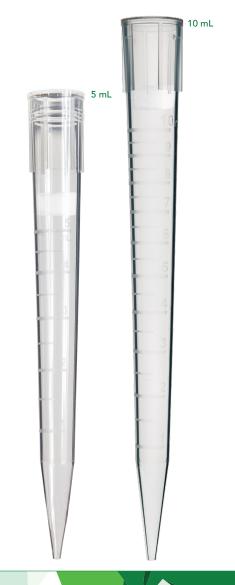
Item #	Volume	Description	Colors	Packaging
4290-00	200 μL	Wide Bore Tips, Bulk	Natural	1000 tips/unit, 10 units/case
4297-00 4297-S0 4297-SF	200 μL	Wide Bore Tips, Racked Wide Bore Tips, Racked, Sterile Wide Bore Tips, Filtered, Racked, Sterile	Natural	96 tips/rack, 10 racks/unit, 5 units/case
4390-00	1 mL	Wide Bore Tips, Bulk	Natural	1000 tips/unit, 10 units/case
4397-00 4397-S0	1 mL	mL Wide Bore Tips, Racked Wide Bore Tips, Racked, Sterile		96 tips/rack, 10 racks/unit, 4 units/case



- Improved accuracy over serological pipettes.
- Tip length facilitates access into bottles, cell culture flasks, and tubes.
- Universal fit for compatibility with most major pipettor brands.
- Certified free of detectable RNase, DNase, DNA, PCR inhibitors, and tested pyrogen-free. Sterile product is certified pyrogen-free.

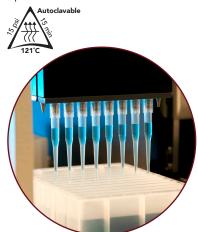
Item #	Volume	Description	Colors	Packaging
4410-00	5 mL	Gilson-Fit, Bulk	Natural	250 tips/unit, 10 units/case
4410-0F	5 mL	Gilson-Fit, Bulk, Filtered	Natural	100 tips/unit, 10 units/case
4411-00 4411-S0 4411-SF	5 mL	Gilson-Fit, Racked Gilson-Fit, Racked, Sterile Gilson-Fit, Racked, Sterile, Filtered	Natural	50 tips/unit, 10 units/case
4420-00	5 mL	Eppendorf-Fit, Bulk	Natural	250 tips/unit, 10 units/case
4420-0F	5 mL	Eppendorf-Fit, Bulk, Filtered	Natural	100 tips/unit, 10 units/case
4421-00 4421-S0 4421-SF	5 mL	Eppendorf-Fit, Racked Eppendorf-Fit, Racked, Sterile Eppendorf-Fit, Racked, Sterile, Filtered	Natural	50 tips/unit, 10 units/case
4520-01	10 mL	Socorex/Finn-Fit, Bulk	Blue	200 tips/unit, 5 units/case
4521-01 4521-S1	10 mL	Socorex/Finn-Fit, Racked Socorex/Finn-Fit, Racked, Sterile	Blue	25 tips/unit, 10 units/case
4530-00	10 mL	Gilson/Eppendorf-Fit, Bulk	Natural	200 tips/unit, 5 units/case
4530-0F	10 mL	Gilson/Eppendorf-Fit, Bulk, Filtered	Natural	50 tips/unit, 10 units/case
4531-00 4531-S0 4531-SF	10 mL	Gilson/Eppendorf-Fit, Racked Gilson/Eppendorf-Fit, Racked, Sterile Gilson/Eppendorf-Fit, Racked, Sterile, Filtered	Natural	25 tips/unit, 10 units/case





#### **Pipette Tips Robotics Tips**

Tips shown in actual size.









# SSIbio Robotic Tips for Biomek® FX, NX, and 3000

- Standard racked tips for Biomek systems with AP96 heads.
- Span-8 compatible.
- No setup changes necessary—use existing tip definitions.
- Lot by lot functional testing performed on Biomek liquid handler.
- Sturdy, non-bowing racks.
- Certified free of detectable RNase, DNase, DNA, PCR inhibitors, and tested pyrogen-free. Sterile product is certified pyrogen-free.



#### 20 μL, Blue Rack

Item #	Nominal Volume	Max Volume	Description	Tip Definition	Packaging
4612-00			Racked		0/ / 1
4612-S0	20 μL	μL 75 μL	Racked, Sterile	AP96 P20 Span-8	96 tips/rack, 10 racks/unit,
4612-SF			Racked, Sterile, Filtered		5 units/case



#### 50 µL, Orange Rack

4632-00			Racked		0/ 1//
4632-S0	50 μL	50 μL	Racked, Sterile	AP96 P200 Span-8	96 tips/rack, 10 racks/unit,
4632-SF			Racked, Sterile, Filtered	- 1	5 units/case



#### 250 uL. Green Rack

4622-00	250 µL	050	Racked		04 .: / 1
4622-S0		250 μL	Racked, Sterile	AP96 P200 Span-8	96 tips/rack, 10 racks/unit,
4622-SF	175 μL	175 μL	Racked, Sterile, Filtered		5 units/case



30 μL, W	hite Rack				
4672-00	30 uL		Racked	. = 00 / = 00	384 tips/rack,
4672-S0	(384-Well)	30 μL	Racked, Sterile	AP384 P30	10/unit, 5 units/case

30 μL

Biomek is a registered trademark of Beckman Coulter, Inc.





# **DuraTubes**™ **High Impact Tube & Cap Assemblies**

Homogenization calls for a tube that is built to withstand the rigors of lysing applications. So when you need to be sure about the tube you select for lysing and bead beating, choose the brand that has the experience, innovation, and reliability of an industry leader: SureSeal DuraTubes from SSIbio.

#### Advantages of SureSeal DuraTubes:

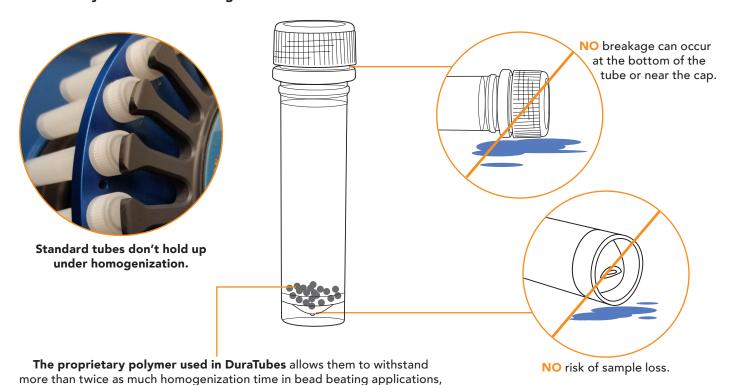
- Manufactured from a proprietary resin that is specially-formulated for bead-beating applications.
- Shatter-resistant—they're up to the task!
- Secure O-ring seal ensures a tight seal.
- Ultra-pure polypropylene meets FDA 21 CFR 177.1520 & USP Class VI.
- Graduated every 100  $\mu L$  for easy volume estimation.
- Self-standing skirted base.
- Certified free of detectable RNase, DNase, DNA, PCR inhibitors, and tested pyrogen-free.

#### **DuraTubes & Caps**

Item #	Description	Packaging
2641-0B	2.0 mL Graduated DuraTubes & Caps, Assembled	200/unit, 5 units/case



# Choose DuraTubes! Don't risk your research to a regular microtube!



compared to other popular screw cap microtubes.

# **Screw Caps with Molded O-Rings**





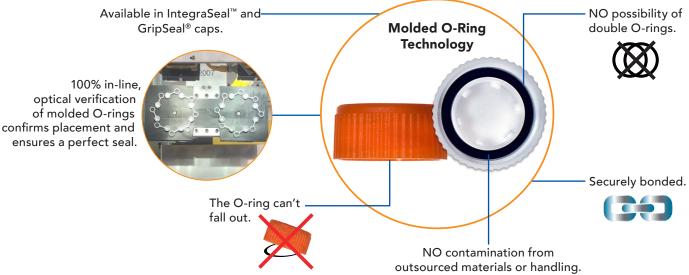






#### **Purity & Security Molded In!**

New technology molds the O-ring directly into the cap, eliminating potential contamination from outsourced O-rings or operator handling.







#### IntegraSeal<sup>™</sup> Caps

- Made from ultra-pure polypropylene (meets FDA 21 CFR 177.1520 & USP Class VI) with an inert TPE O-ring molded directly into the cap.
- Available in standard cap or tethered.
- Available in a variety of colors for branding or organization.
- Easy ¾ turn to open and close.

Item #	Description	Colors	Packaging
2007-00	IntegraSeal Caps	-00, -40, -51, -52, -53, -54, -55, -56	500/unit,
2008-00	IntegraSeal Caps with Tether	-00, -40, -51, -52, -53, -54, -55, -56	10 units/case

# GripSeal® Caps

- Made from ultra-pure polypropylene (meets FDA 21 CFR 177.1520 & USP Class VI) with an inert TPE O-ring molded directly into the cap.
- Rubber ribs on cap allow for effortless opening and closing—even when frozen.
- Contrasting color stripes enable easy branding or organization.
- Easy ¾ turn to open and close.
- Easy labeling surface.

Item #	Description	Colors	Packaging
2005-00	GripSeal Caps	-00, -01, -02, -03, -04, -05, -06, -09 <sup>1</sup> , -40	500/unit, 10 units/case

# **Standard Screw Caps**

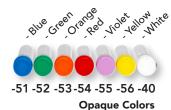
- Easy ¾ turn to open and close.
- Synthetic O-ring, except 2003.
- Available with and without attached tether.
- 2003 and 2004 accommodate colorful cap inserts to facilitate easy branding or organization.

Item #	Description	Colors	Packaging
2001-00	Standard Cap	-40, -51, -52, -53, -54, -55, -56, -59 <sup>1</sup> , -00, -31, -32, -33, -34, -35, -36, -07, -09 <sup>1</sup>	
2002-00	Standard Cap with Tether	-40, -51, -52, -53, -54, -55, -56, -59 <sup>1</sup> , -00, -07	
2003-00	Insertable Cap with Silicone O-ring	-40, -51, -52, -53, -54, -55, -56, -59 <sup>1</sup> , -00	500/unit, 10 units/case
2004-00	Insertable, Tethered Cap	-00 Clear	
2000D	Cap Inserts	-40, -51, -52, -53, -54, -55, -56, -09 <sup>1</sup>	

2001-00 2002-00

**Available Cap Colors** 

<sup>1</sup>**Assorted Colors:** Item #'s ending in -59 or -09 include 6 colors: blue, green, orange, red, violet, yellow. ● ● ● ●



-00 -07 -31 -32 -33 -34 -35 -36



Confidence.

Purity.

Security.

# It's not just a cap to you.

It's confidence-knowing your solutions are sealed in an environment that is pure and secure.







#### Tubes shown at actual size.

#### 0.5 mL Microtubes



#### 1.5 mL Microtubes







2.0 mL Microtubes



#### **Screw Microtubes**

- Manufactured from high-clarity, ultra-pure polypropylene (meets FDA 21 CFR 177.1520 & USP Class VI).
- Suitable for a wide range of temperatures—from -196°C to +121°C. **Note**: not suitable for immersion in liquid nitrogen.
- Rated to 20,000 x G.
- Graduated versions marked at every 100  $\mu$ L to provide easy sample estimation.
- Certified free of detectable RNase, DNase, DNA, PCR inhibitors, and tested pyrogen-free.

#### 0.5 mL Microtubes

Item #	Base	Graduation	Ribbing	Color	Packaging
2120-00	Skirted	No	Yes	Clear	
2120-07	Skirted	No	Yes	Amber	
2140-00	Skirted	No	No	Clear	500/unit, 10 units/case
2140-07	Skirted	No	No	Amber	To diffes case
2130-00	Conical	No	No	Clear	

#### 1.5 mL Microtubes

Item #	Base	Graduation	Ribbing	Color	Packaging
2220-00	Skirted	No	Yes	Clear	
2220-07	Skirted	No	Yes	Amber	
2240-00	Skirted	No	No	Clear	
2240-07	Skirted	No	No	Amber	500/unit,
2210-00	Conical	No	Yes	Clear	10 units/case
2530U00	Conical	No	No	Clear	
2230-00	Conical	Yes	No	Clear	
2230-07	Conical	Yes	No	Amber	

#### 2.0 mL Microtubes

Item #	Base	Graduation	Ribbing	Color	Packaging
2320-00	Skirted	No	Yes	Clear	
2320-07	Skirted	No	Yes	Amber	
2640U00	Skirted	No	No	Clear	
2340-00	Skirted	Yes	No	Clear	
2340-07	Skirted	Yes	No	Amber	500/unit, 10 units/case
2310-00	Conical	No	Yes	Clear	To diffes case
2630U00	Conical	No	No	Clear	
2330-00	Conical	Yes	No	Clear	
2330-07	Conical	Yes	No	Amber	

# **Tube & Cap Assemblies, Sterile**

- Manufactured from high-clarity, ultra-pure polypropylene (meets FDA 21 CFR 177.1520 & USP Class VI).
- Suitable for a wide range of temperatures—from -196°C to +121°C. **Note**: not suitable for immersion in liquid nitrogen.
- Sterile and certified free of detectable DNase, RNase, DNA, PCR inhibitors, and pyrogens.

#### **Sterile Tube & Standard Cap Assemblies**

50 assemblies/unit, 50 units/case	0.5 mL Conical Base	0.5 mL Skirted Base	1.5 mL Conical Base	1.5 mL Skirted Base	2.0 mL Conical Base	2.0 mL Skirted Base
Tubes + Standard Caps (2001-00)						
Non-Graduated	2131-S0	2141-S0		2241-S0		
Graduated			2231-S0		2331-S0	2341-S0
Ribbed		2121-S0	2211-S0 <sup>1</sup>	2221-S0	2311-S0 <sup>1</sup>	2321-S0
Tubes + Standard Tethered Caps	(2002-00)					
Non-Graduated	2132-S0 <sup>1</sup>	2142-S0		2242-S0		
Graduated			2232-S0		2332-S0	2342-S0
Ribbed		2122-S0 <sup>1</sup>	2212-S0 <sup>1</sup>	2222-S0 <sup>1</sup>	2312-S0 <sup>1</sup>	2322-S0 <sup>1</sup>
Tubes + Insertable Caps (2003-00	))					
Non-Graduated	2133-S0 <sup>1</sup>	2143-S0 <sup>1</sup>		2243-S0 <sup>1</sup>		
Graduated			2233-S0 <sup>1</sup>		2333-S0 <sup>1</sup>	2343-S0 <sup>1</sup>
Ribbed		2123-S0 <sup>1</sup>	2213-S0 <sup>1</sup>	2223-S0 <sup>1</sup>	2313-S0 <sup>1</sup>	2323-S0 <sup>1</sup>
Tubes + Insertable Tethered Caps	s (2004-00)				'	'
Non-Graduated	2134-S0 <sup>1</sup>	2144-S0 <sup>1</sup>		2244-S0 <sup>1</sup>		
Graduated			2234-S0 <sup>1</sup>		2334-S0 <sup>1</sup>	2344-S0 <sup>1</sup>
Ribbed		2124-S0 <sup>1</sup>	2214-S0 <sup>1</sup>	2224-S0 <sup>1</sup>	2314-S0 <sup>1</sup>	2324-S0 <sup>1</sup>
Tubes + GripSeal Caps (2005-00)						
Non-Graduated	2135-S0 <sup>1</sup>	2145-S0 <sup>1</sup>		2245-S0 <sup>1</sup>		
Graduated			2235-S0 <sup>1</sup>		2335-S0 <sup>1</sup>	2345-S0 <sup>1</sup>
Ribbed		2125-S0 <sup>1</sup>	2215-S0 <sup>1</sup>	2225-S0 <sup>1</sup>	2315-S0 <sup>1</sup>	2325-S0 <sup>1</sup>

<sup>&</sup>lt;sup>1</sup>Custom item. Minimum 10-case order applies. Please inquire.





















# **Microcentrifuge Tubes**

**Pirouet™ Centrifuge Tubes** are the trusted choice in laboratories all around the world, for applications ranging from 0.5 mL to 50 mL. It all begins with a proprietary, ultra-pure resin that ensures optimal clarity, purity, and strength. Plus, over two decades of research and innovation have been instilled into these tubes, resulting in a product that performs to expectation and provides tremendous value.

#### **Advantages of Pirouet Microcentrifuge Tubes**

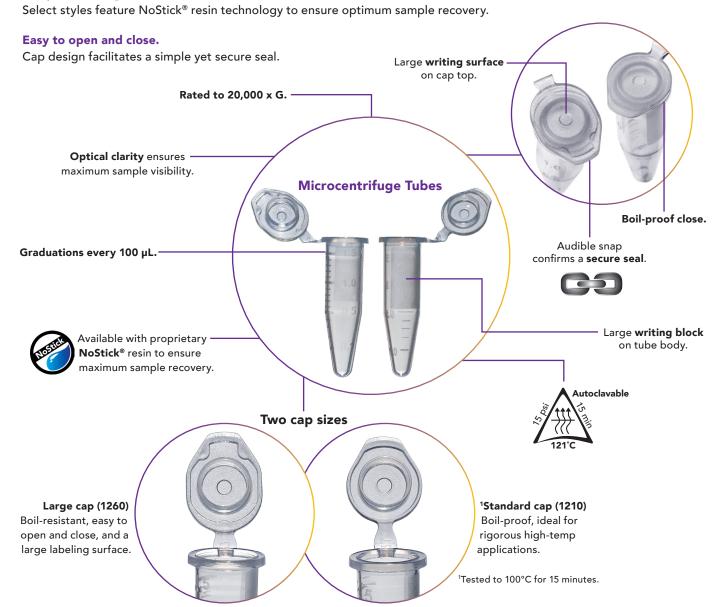
#### Clarity.

Ultra-Pure, virgin polypropylene delivers crystal clarity and improves visibility.

#### Graduations.

High-contrast graduations facilitate more accurate volume estimation.

#### Sample Recovery.



# Pirouet™ 0.5, 1.5, and 2 mL Microcentrifuge Tubes

- Two cap styles to suit customer preference:
  - Boil-proof caps are ideal for rigorous high-temp applications and tight storage conditions.
  - Large, boil-resistant caps are easy to open & close, with a large labeling surface.
- Crystal-clear polymer facilitates visualization of samples.
- Rated to 20,000 x G.
- Graduations at every 100  $\mu L$  for easy volume estimation.
- Available with proprietary NoStick® resin to ensure maximum sample recovery.
- Temperature range: -80°C to +121°C.
- Certified free of detectable RNase, DNase, DNA, PCR inhibitors, and tested pyrogen-free. Sterile product is certified pyrogen-free.

#### **Graduated Microcentrifuge Tubes**

Item #	Max Fill	Description	Colors	Packaging
1110-00	0.65 mL	0.5 mL Boil-Proof Cap	-00, -01, -02, -03, -04, -05,	1000/unit, 10 units/case
1210-00	1.7 mL	1.5 mL Boil-Proof Cap	-06, -07, -09, -29	500/unit, 10 units/case
1260-00	1.7 mL	1.5 mL Boil-Resistant, Large Cap	-00, -01, -02, -03, -04, -05, -06, -09	500/unit, 10 units/case
1310-00	2.0 mL	2.0 mL Boil-Proof Cap	-00, -01, -02, -03, -04, -05, -06, -07, -09	500/unit, 10 units/case

#### **Graduated Microcentrifuge Tubes, Sterile**

1110-S0	0.65 mL	0.5 mL Boil-Proof Cap, Sterile	-00 Clear	500/unit, 10 units/case
1210-S0	1.7 mL	1.5 mL Boil-Proof Cap, Sterile		250/unit, 10 units/case
1310-S0	2.0 mL	2.0 mL Boil-Proof Cap, Sterile		250/unit, 10 units/case

# NoStick®, Graduated Microcentrifuge Tubes

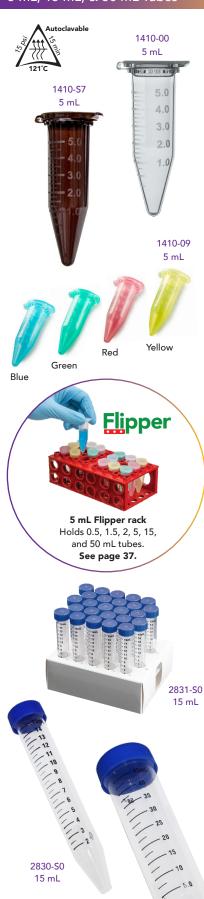


1110-10	0.65 mL	0.5 mL NoStick, Boil-Proof Cap	-00 Clear	500/unit, 10 units/case
1210-10	1.7 mL	1.5 mL NoStick, Boil-Proof Cap	-00 Clear	250/unit, 10 units/case
1310-10	2.0 mL	2.0 mL NoStick, Boil-Proof Cap	-00 Clear	250/unit, 10 units/case

#### **Graduated Microcentrifuge Tubes without Caps**

1270-00	1.7 mL	1.5 mL Capless	-00 Clear	500/unit, 10 units/case
1370-00	2.0 mL	2.0 mL Capless	-00 Clear	500/unit, 10 units/case





# **Pirouet 5 mL Microcentrifuge Tubes**

Pirouet<sup>™</sup> 5 mL microcentrifuge tubes are the perfect intermediate volume option between traditional microcentrifuge tubes and 15 mL conical tubes.

- Suitable for all rotors and racks that hold 15 mL conical tubes—no adapters needed.
- Graduated every 250 µL for easy volume estimation.
- Rated to 25,000 x G for high-speed centrifugation.
- Flat, frosted cap and a writing surface on the side of the tube.
- Temperature range: -80°C to 100°C.
- Certified free of detectable RNase, DNase, DNA, PCR inhibitors, and tested pyrogen-free. Sterile product is certified pyrogen-free.

Item #	Max Fill	Description	Colors	Packaging
1410-00	5 mL	Microcentrifuge Tube	Clear	100/unit, 2 units/case
1410-S0	5 mL	Microcentrifuge Tube, Sterile	Clear	50/unit, 4 units/case
1410-S7	5 mL	Microcentrifuge Tube, Sterile	Amber	50/unit, 4 units/case
1410-09	5 mL	Microcentrifuge Tube	Assorted Colors <sup>1, 2</sup>	50/unit, 4 units/case
5415-59	n/a	5 mL Flipper Rack	Assorted Colors <sup>2</sup>	4 racks/unit, 4 units/case

<sup>1</sup>Assorted colors come in 4 individually-packed, stand-up, resealable pouches for easy access and clean storage.

<sup>2</sup>Assorted Colors: Item #s ending in -09 and -59 include an assortment of 4 colors: blue, green, red, yellow.

# 15 and 50 mL Centrifuge Tubes, Sterile

- High-clarity, medical-grade polymer.
- Graduations every 1 mL (15 mL tube) or 5 mL (50 mL tube) increments.
- Centrifugation rating:
  - 15 mL tubes to 17,000 x G.
  - 50 mL tubes to 20,000 x G.
  - 50 mL skirted-base tubes to 12,500 x G.
- Temperature range: -80° to 40°C.
- Sterile and certified free of detectable DNase, RNase, DNA, PCR inhibitors, and pyrogens.

#### **Conical Base Centrifuge Tubes**

Item #	Description	Packaging
2830-S0	15 mL Graduated Tube, Bulk, Sterile	50/unit, 10 units/case
2831-S0	15 mL Graduated Tube, Racked, Sterile	2 racks of 25/unit, 10 units/case
2930-S0	50 mL Graduated Tube, Bulk, Sterile	50/unit, 10 units/case
2931-S0	50 mL Graduated Tube, Racked, Sterile	1 rack of 25/unit, 20 units/case

#### **Skirted Base Centrifuge Tubes**

2940-S0	50 mL Graduated Tube, Sterile	50/unit, 10 units/case
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2930-S0 50 mL

#### **Tube Accessories**

#### **Cap Openers**

• Ease fatigue when opening and closing large numbers of microtubes.

Item #	Description	Colors	Packaging
1007-09	Cap Openers	Assorted Fluorescent: Blue, Green, Red, Orange, Yellow, Black	100/unit, 10 units/case





#### **Cap Locks**

- Securely seal microcentrifuge tubes against the rigors of boiling.
- Large, easy-to-grip tab permits safe insertion and removal from boiling water and heating blocks.
- Bright colors and writing area facilitate easy identification or organization into types.

Item #	Description	Colors	Packaging
1002-39	Cap Lock for 0.5 mL Tubes	Assorted Fluorescent: Blue, Green, Red, Orange, Yellow, Black	100/unit, 10 units/case
1003-39	Cap Lock for 1.5 mL or 2.0 mL Tubes		100/unit, 10 units/case





#### **Pestles**

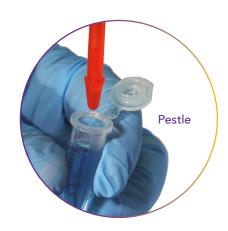
- Homogenize cells or resuspend precipitates such as protein or DNA pellets.
- Certified free of detectable RNase, DNase, DNA, PCR inhibitors, and tested pyrogen-free.

Item #	Description	Colors	Packaging
1004-39	Pestles for 0.5 mL Tubes	Assorted Fluorescent: Blue, Green, Red, Orange, Violet	10/unit, 40 units/case
1005-39	Pestles for 1.5 mL Tubes		10/unit, 40 units/case









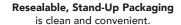




CryoFreeze Tubes and cap inserts are autoclavable.

- Ultra-pure polypropylene meets FDA 21 CFR 177.1520 & USP Class VI.
- Tubes comply with the In Vitro Devices Directive (IVD).
- Contrasting black 100 µL graduations are bold and easy to read.
- Large white writing area on all tubes.
- Optimized for vapor-phase liquid nitrogen storage. Note: not suitable for immersion in liquid nitrogen.
- Available with round base or self-standing Stargrip<sup>™</sup> base.
- Temperature range: -196°C to 121°C.

# **Cryogenic Tubes & Caps**



# Internally-Threaded



#### CryoFreeze® Tubes with Internally-Threaded Caps

- Polypropylene cap has silicone rubber O-ring for a secure, leakproof seal.
- Maximize tube storage within racks, boxes, and canes.
- Sterile and certified free of detectable DNase, RNase, DNA, PCR inhibitors, and pyrogens.

Sterile Item #	Volume	Base Type	Packaging
6112-S0	1.0 mL	Stargrip	
6121-S0	1.8 mL	Round	50/unit, 10 units/case
6122-S0	1.8 mL	Stargrip	10 a
6131-S0	3.6 mL	Round	50/unit,
6132-S0	3.6 mL	Stargrip	8 units/case
6141-S0	4.5 mL	Round	50/unit,
6142-S0	4.5 mL	Stargrip	6 units/case

#### **Externally-Threaded**



#### **CryoFreeze Tubes with Externally-Threaded Caps**

- HDPE cap has secure, lip-seal feature so no O-ring is necessary.
- External threads reduce contamination and cross-contamination potential.
- Sterile and certified free of detectable DNase, RNase, DNA, PCR inhibitors, and pyrogens.

Sterile Item #	Volume	Base Type	Packaging
6212-S0	1.0 mL	Stargrip	
6321-S0 <sup>1</sup>	1.8 mL	Round	50/unit, 10 units/case
6222-S0	1.8 mL	Stargrip	To utility case
6242-S0	4.5 mL	Stargrip	50/unit, 6 units/case

<sup>&</sup>lt;sup>1</sup>Cap and tube have same outer diameter; ideal for cane storage.

#### **Cap Insert Colors:**



6000-09

#### **Cap Inserts**

Item #	Colors	Packaging
6000-2	-01, -02, -03, -04, -05, -06, -07, -09, -OG, -OP, -OW	500/unit, 4 units/case

<sup>&</sup>lt;sup>2</sup>Fits all caps except 6321-S0.

# **CryoFreeze Racks**



#### **Clear Labeling**

High-contrast alphanumeric indexing for fast sample identification.

#### **Ribbed Wells**

Ribs inside the wells enable tubes with Stargrip™ bases to be easily opened or closed with one hand.

#### **No-Slip Base**

Rubber no-slip grips on the base hold the rack securely on the benchtop.

Temperature range: -80°C to 121°C.

Item #	Description	Colors	Packaging
5160-0G	40-Place CryoFreeze GripRack	White/Gray	20 racks/case



#### **CryoFreeze Storage Racks**

- Tough, durable polycarbonate construction prevents warping.
- Drains and vents prevent pressure build-up.
- Temperature range: -196°C to 121°C.
- Crystal clear lid for sample visibility.
- Bright, attractive assorted colors.
- High-contrast alphanumeric indexing.
- Max tube dimensions:
  - 5700-19, 5720-19, and 5750-19: 12 x 49 mm.

(1.0/1.8 mL Tubes)

• 5730-19: 12 x 90 mm.				
Item #	Description	Format	Dimensions	Packaging
5700-19 <sup>1</sup>	25-Place Rack, Assorted Colors (1.0/1.8 mL Tubes)	5 x 5	76 x 76 x 54 mm	
5720-19 <sup>1</sup>	81-Place Rack, Assorted Colors (1.0/1.8 mL Tubes)	9 x 9	133 x 133 x 54 mm	5/unit,
5730-19¹	81-Place, Deep Rack, Assorted Colors (4.5 mL Tubes)	9 x 9	133 x 133 x 95 mm	4 units/case
5750 <sub>-</sub> 10 <sup>1</sup>	100-Place Rack, Assorted Colors	10 x 10	133 x 133 x 54 mm	

10 x 10 | 133 x 133 x 54 mm

#### <sup>1</sup>Assorted Colors:

Item #s ending in -19 include 5 colors: blue, green, red, orange, yellow.

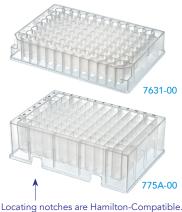






5750-19<sup>1</sup>

# **Citadel**









## **Deep Well Plates**

#### Ideal for sample collection, preparation, and long-term storage.

Citadel™ Deep-Well Plates and Cluster Tube Systems are ideal for high-throughput screening processes and long-term storage. It all begins with high-clarity, ultra-pure polypropylene, combined with proprietary injection molding techniques to produce high-clarity vessels that are exceptionally robust, chemically-resistant, and pure.

- HTS-friendly—compatible with most liquid-handling robots.
- Centrifugation to 4,000 x G.
- Manufactured from virgin polypropylene to ensure purity and sample integrity, chemical resistance, and compatibility with long-term storage needs.
- Alphanumeric indexing molded in on A-H and 1-12 axes.
- Optimum sample mixing and recovery with highly-polished wells and radiused corners.
- Raised rims on each well facilitate secure sealing with films and sealing mats.
- Bar coded plates available—please inquire.
- Certified free of detectable RNase DNase, DNA, PCR inhibitors, and tested pyrogen-free. Sterile product is certified pyrogen-free.



#### **Deep Well Plates**

Item #	Description	# of Wells	Packaging
7631-00 7631-S0 <sup>1</sup>	1.1 mL Deep-Well Plate, Round Bottom 1.1 mL Deep-Well Plate, Round Bottom, Sterile	96 Round Wells	5/unit, 10 units/case
775A-00 775A-S0 <sup>1</sup>	2.2 mL Deep-Well Plate, Square, V-Bottom, Black Alphanumerics, Hamilton® Compatible	96 Round Wells	10/unit, 10 units/case
775B-00 775B-S0 <sup>1</sup>	1.1 mL Deep-Well Plate, Square, V-Bottom, Black Alphanumerics, Hamilton® Compatible	96 Square Wells	
7651-00 7651-S0 <sup>1</sup>	2 mL Deep-Well Plate, Round Bottom 2 mL Deep-Well Plate, Round Bottom, Sterile	96 Round Wells	5/unit,
7753-00 7753-S0 <sup>1</sup>	2.2 mL Deep-Well Plate, Square, V-Bottom 2.2 mL Deep-Well Plate, Square, V-Bottom, Sterile	96 Square Wells	10 units/case
7832-00 7832-S0 <sup>1</sup>	240 μL Deep-Well Plate, V-Bottom 240 μL Deep-Well Plate, V-Bottom, Sterile	384 Square Wells	

<sup>&</sup>lt;sup>1</sup>Sterilized in units of 5 plates.

#### **Sealing Foil and Mats**

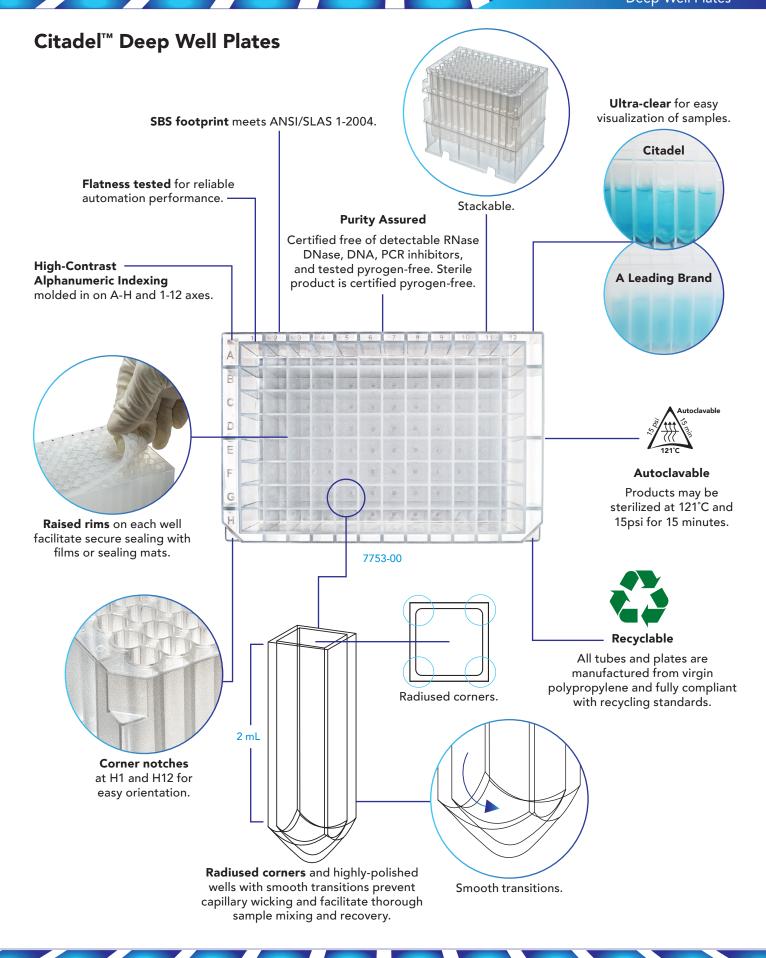
- Citadel XR Foil is suitable for long term storage in extreme conditions and resistant to DMSO and other solvents.
- Silicone sealing mats are reusable and pierceable.
- Temperature range for foil or mats: -80° to +120°C.

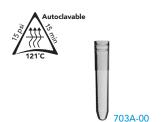
Item #	Description	Well Fit	Packaging
3670-00	Citadel XR Foil for Extreme Conditions 129.0 x 78.3 mm (118.1 without Tabs)	96 Wells, Round or Square	100/unit, 5 units/case
76M1-00 76M1-S0 <sup>1</sup>	Sealing Mat for Deep-Well Plate Sealing Mat for Deep-Well Plate, Sterile	96 Round Wells	10/unit,
77M1-00 77M1-S0 <sup>1</sup>	Sealing Mat for Deep-Well Plate Sealing Mat for Deep-Well Plate, Sterile	96 Square Wells	5 units/case

<sup>&</sup>lt;sup>1</sup>Sterilized in units of 5 plates.

#### Reservoir

Item #	Description	Volume	Max Volume	# of Channels	Packaging
7A5A-00	12-Channel Reservoir	20 mL	22 mL	12 Channels	5/unit, 4 units/case













# Citadel™ Cluster Tubes & Rack Systems

Ideal for storage, dilution, mixing, harvesting, culture assays, and screening.

- SBS footprint; 8 × 12 format.
- Ideal for automation / HTS.
- 1.2 mL individual tubes, strips of 8 tubes, and strips of 12 tubes.
- Tubes and racks are made from virgin polypropylene; strip caps are polyethylene.
- This rack and tube system is suitable as a reaction vessel in your robotic workstation or as a long-term storage vessel in your sample library.
- A clear lid is a standard part of racked system.
- Certified free of detectable RNase DNase, DNA, PCR inhibitors, and tested pyrogen-free. Sterile product is certified pyrogen-free.

#### **Non-Racked Tubes**

Item #	Sterile Item #	Description	Packaging
703A-00	n/a	Individual Tubes	1000/unit, 10 units/case
703B-00	n/a	Strips of 8 Tubes	125/unit, 10 units/case
703C-00	n/a	Strips of 12 Tubes	80/unit, 10 units/case

#### **Cap Strips**

Item #	Sterile Item #	Description	Packaging
7032-00	7032-S0	Strips of 8 Caps	125/unit, 10 units/case
7033-00	7033-S0	Strips of 12 Caps	80/unit, 10 units/case

#### **Racked Tubes with Lid**

Item #	Sterile Item #	Description	Packaging
713A-00	713A-S0	Individual Tubes, Racked	10/unit, 10 units/case
713B-00	713B-S0	Strips of 8 Tubes, Racked	10/unit, 10 units/case
713C-00	713C-S0	Strips of 12 Tubes, Racked	10/unit, 10 units/case

#### **Racked Tubes with Lid**



#### Secure Vessels for Storage & Reaction

A clear lid is a standard part of racked system.

Rack and tube system is suitable as a reaction vessel in your robotic workstation or as a long-term storage vessel in your sample library.

Individual tubes, strips of 8 tubes and strips of 12 tubes.

Tubes and racks are made from virgin polypropylene; strip caps are polyethylene.

Bold, black alphanumeric indexing.





Flipper® Racks have been a mainstay of laboratories around the world for 30 years. The innovative design of Flipper Racks provides researchers with greater flexibility on the bench without managing multiple racks.

From the basic 4-Way Flipper rack design to the Sliplock and Revolver, researchers are sure to find the ideal Flipper Rack for their lab.

### **4-Way Flipper Racks**

- Small footprint is perfect for the benchtop or under the hood.
- Suitable for use in ultra-low temperature freezers (-90°).
- Available in standard or interlocking versions.
- Accommodates all popular tube sizes, from 0.5 mL to 50 mL, and 20-25 mm.
- Rugged polypropylene construction.

Item #	Description	Tube Options	Colors	Packaging
5410-29	4-Way Interlock Flipper 171 × 91 × 54 mm	Side 1: 32 x 1.5-2.0 mL Side 2: 32 x 0.5 mL Side 3: 12 x 5 or 15 mL Side 4: 4 x 50 mL	Fluorescent: Blue, Green, Yellow, Orange, Pink	5/unit, 4 units/case
5415-59	4-Way Flipper 5 mL 171 x 91 x 54 mm	Side 1: 18 x 5 mL and 32 x 0.5 mL Side 2: 32 x 1.5-2.0 mL Side 3: 12 x 5 or 15 mL Side 4: 4 x 50 mL	Standard: Blue, Green, Red, Yellow	4/unit, 4 units/case
5420-29	4-Way Flipper 50 mL 8 x 50 mL Tubes 198 x 114 x 95 mm	Side 1: 8 x 50 mL Side 2: 20 x 20 mm Side 3: 24 x 5 or 15 mL Side 4: 40 x 1.5-2.0 mL	Fluorescent: Blue, Green, Yellow, Orange, Pink	5/unit, 2 units/case
5430-39	4-Way Flipper 25 mm 12 x 25 mm Tubes 198 × 114 × 95 mm	Side 1: 12 x 25 mm Side 2: 20 x 20 mm Side 3: 40 x 1.5-2.0 mL Side 4: 24 x 5 or 15 mL	Standard: Blue, Green, Red, Orange, Violet	5/unit, 2 units/case

### 4-Way Flipper Racks with Tray

- Multi-tube compatibility.
- Four 4-Way racks in a convenient tray.
- Each Flipper can be independently oriented.
- 4-Way rack can be used either in the tray or independently.
- Standard or fluorescent colors.

**Racks** 

Item #	Description	Tube Options	Colors	Packaging
5400-39	4-Way Flipper with Tray Standard Colors 243 × 102 × 41 mm	12 x 0.5 mL 9 x 1.5-2.0 mL 6 x 15 mL 2 x 50 mL	Standard: Green, Blue, Red, Yellow	1 tray/unit, 5 units/case
5400-29	4-Way Flipper with Tray Fluorescent Colors 243 × 102 × 41 mm	12 x 0.5 mL 9 x 1.5-2.0 mL 6 x 15 mL 2 x 50 mL	Fluorescent: Green, Yellow, Orange, Pink	1 tray/unit, 5 units/case









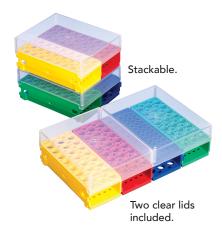








Slip and lock the racks together.

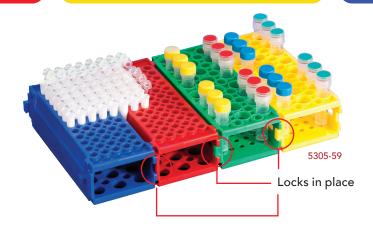






Revolve to create the perfect workstation.





### Sliplock™ Flipper®

- Expandable mini workstation, includes 4 interchangeable racks and 2 clear lids.
- Capacity:
  - 16 x 0.5 mL tubes per rack.
  - 24 x 1.5/2.0 mL tubes per rack.
  - $60 \times 0.1/0.2$  mL PCR tubes per rack.
  - 12 x 8-strip or 11 x 12-strip PCR tubes per 2 racks.
  - 1 x non-skirted or semi-skirted 96-well PCR plate per 2 racks.
- Dimensions (L x W x H):
  - 1 rack: 134 x 54 x 35mm.
  - 2 racks: 134 x 108 x 35mm (134 x 110 x 58 with lid).
  - 4 racks: 215 x 134 x 35mm (220 x 134 x 58 with lids).
- Temperature range: -80°C to +121°C.
- Rugged polypropylene construction.

Item #	Description	Colors	Packaging
5305-59	Sliplock Flipper 4 Racks and 2 Clear Lids	Green, Blue, Red, Yellow	1 workstation/unit, 4 units/case

### Revolver Flipper® - the ultimate workstation!

- Add or subtract rack units to suit your needs.
- PCR workstation options:
  - 48 x 0.2 mL tubes per block.
  - 6 x 8 tube strips per block.
  - 8 x 12 tube strips per 2 blocks.
  - 1 x non-skirted or semi-skirted 96 well plate per 2 blocks.
- Four rotate-and-lock racks.
- Fast reconfiguration for different tube sizes and types.
- Temp range: -80°C to +121°C.
- Rugged polypropylene construction.

Item #	Description	Tube Options	Colors	Packaging
5405-59	Revolver Flipper 257 x 108 x 108 mm	Side 1: 6 x 0.5 mL and 12 x 1.5/2.0 mL Side 2: 8 x 5 or 15 mL Side 3: 2 x 50 mL Side 4: 48 x 0.2 mL	Green, Blue, Red, Yellow	4 rack blocks/unit, 4 units/case

Autoclavable

## 32-Place Junior Flipper® (4 x 8 Format)

Perfect for sequencing.

- Side A: 32 x 1.5/2.0mL + 8 x 0.5 mL.
- Side B:  $32 \times 0.5 \text{ mL} + 8 \times 1.5/2.0 \text{ mL}$ .

Item #	Description	Colors	Packaging
5300-29	Rack with Clear Lid 169 × 81 × 48 mm	-29 Assorted Fluorescent <sup>1</sup>	5 racks with lids/unit, 4 units/case
5302-29	Rack Only 169 × 79 × 28 mm	-29 Assorted Fluorescent <sup>1</sup>	5 racks/unit, 4 units/case

5300-29

### 64-Place Flipper® (8 x 8 Format)

A great replacement for cardboard or metal freezer racks.

- Side A: 64 x 1.5/2.0 mL.
- Side B: 64 x 0.5 mL.

Item #	Description	Colors	Packaging
5310-29	Rack with Clear Lid	-29 Assorted Fluorescent <sup>1</sup>	5 racks with lids/unit,
	132 × 130 × 45 mm	-00 Clear	4 units/case
5312-29	Rack Only	-29 Assorted Fluorescent <sup>1</sup>	5 racks/unit,
	132 × 127 × 31 mm	-00 Clear	4 units/case



5310-29

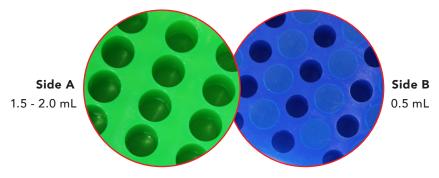
### 96-Place Flipper® (8 x 12 Format)

The perfect partner for PCR prep.

- Side A: 96 x 1.5/2.0 mL.
- Side B: 96 x 0.5 mL.

Item #	Description	Colors	Packaging
5320-00	Rack with Clear Lid 213 × 118 × 50 mm	-00, -31, -32, -33, -34, -35, -36, -39 <sup>2</sup> , -21, -22, -23, -24, -26, -29 <sup>1</sup> , -41	5 racks with lids/unit, 2 units/case
5321-00	Clear Lid Only 206 × 118 × 29 mm	-00 Clear	1 lid/unit, 10 units/case
5322-00	Rack Only 213 × 113 × 27 mm	-00, -31, -32, -33, -34, -35, -36, -39 <sup>2</sup> , -21, -22, -23, -24, -26, -29 <sup>1</sup> , -41	5 racks/unit, 2 units/case





### **Fluorescent Colors:**

- -21 Blue -24 - Pink -22 - Green -26 - Yellow • -23 - Orange • -29 - Assorted
- <sup>1</sup>Assorted Fluorescent Colors: Item #s ending in -29 include 5 colors: blue, green, orange, pink, yellow.

### **Standard Colors:**

- -00 Clear ●-33 - Orange • -36 - Yellow • -31 - Blue •-34 - Red 9-39 - Assorted •-35 - Violet • -41 - Black • -32 - Green
- <sup>2</sup>Assorted Standard Colors: Item #s ending in -39 include 5 colors: blue, green, orange, red, violet.



# **IsoFreeze Color Change Racks**

- Maintain a sample temperature of less than 4°C for up to 4 hours (varies by model) when used at room temperature.
- Color change material enables you to see how cold your samples are at a glance.
- IsoFreeze color change racks undergo a dramatic change to a contrasting color at 7°C.



NEW! IsoFreeze qPCR Specially designed for Qiagen®/Corbett Rotor-Gene® tubes. See page 9 for Corbett Tubes.



5660-TW

# qPCR & PCR Solutions



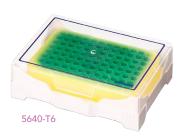


Gradual fade in color indicates slowly rising sample temperatures.



Blue rack color indicates safe sample temperature.





### IsoFreeze® PCR Racks

- Tube and plate capacity:
  - qPCR:  $64 \times 0.1$  mL Corbett Rotor-Gene tubes,  $16 \times 0.2$  mL tubes or strips, and  $4 \times 0.5$  mL tubes.
  - PCR: 96 x 0.1 and 0.2 mL tubes and strip tubes; plates up to 96-well.
- Dimensions: 141 × 99 × 44 mm.

Item #	Description	Cold to Warm Color Change	Est. Time below 4°C	Packaging
5660-TW	qPCR Rack	Blue to White	2.5 Hours	
5640-T4	PCR Rack	Purple to Pink	3+ Hours	2 racks/unit, 5 units/case
5640-T6	PCR Rack	Green to Yellow	3+ Hours	5 dilits/case

### IsoFreeze® PCR, SBS

- SBS footprint for use with liquid handing equipment.
- Accommodates 96-well PCR plates, strip tubes, or 0.2 mL tubes.
- Rack does not come with lid.

Item #	Description	Cold to Warm Color Change	Estimated Time at 4°C	Packaging
5650-T4	PCR, SBS Rack	Purple to Pink	2.5 Hours	2/unit, 5 units/case
5650-T6	PCR, SBS Rack	Green to Yellow	2.5 Hours	2/unit, 5 units/case



### IsoFreeze® MCT

- Dimensions: 146 × 105 × 70 mm.
- Tube capacity: 24 x 0.5, 1.5, 2.0 mL snap or screw-cap style tubes.
- Rack comes with lid.

Item #	Description	Cold to Warm Color Change	Estimated Time at 4°C	Packaging
5630-T4	MCT Rack	Purple to Pink	3.5+ Hours	1/unit, 5 units/case
5630-T6	MCT Rack	Green to Yellow	3.5+ Hours	1/unit, 5 units/case



# IsoFreeze® Flipper Racks

- IsoFreeze temperature maintenance racks. Lid included.
- Consistent thermal protection.
- One side holds  $20 \times 1.5/2.0$  mL tubes, and the other side holds  $20 \times 0.5$  mL tubes.
- Tough polycarbonate material.
- Dimensions: 172 x 104 × 108 mm.
- IsoFreeze Flipper is available in two temperature ranges:
  - Blue -20°C unit will maintain a temperature between -10° and -20°C for up to 3 hours.
  - White 0°C unit will maintain a temperature of 0°C for a minimum of five hours.
- Racks are filled with an inert, non-toxic gel.

Item #	Description	Format	Indexing	Colors	Packaging
5610-43	Flipper -20°C	4 x 5	1 to 20	Blue	1 rack/unit, 4 units/case
5610-40	Flipper 0°C	4 x 5	1 to 20	White	1 rack/unit, 4 units/case



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# **Storage & Freezer Racks**

### 15 & 50 mL Tube Racks

- Convenient freezer storage.
- Numerical index on grid.
- Rugged polypropylene construction.
- Unique pull tab enables safe removal from freezer racks.
- Temperature range: -90°C to + 121°C (autoclavable).
- Dimensions:  $144 \times 144 \times 127$  mm, 102 mm without lid.

Item #	Description	Format	Indexing	Max Tube Dimensions	Colors	Packaging
5570-02	15 mL × 36-Place Rack	6 × 6	1 to 36	18 x 121 mm	Green	2/unit, 6 units/case
5580-01	50 mL × 16-Place Rack	4 × 4	1 to 16	30 x 121 mm	Blue	2/unit, 6 units/case



### 80-Place Tube Racks

- Fraction collector plate style.
- Versatile & efficient storage in bright, fluorescent colors.
- Holds tubes up to 2.0 mL, 11 x 26 mm maximum.
- Rack dimensions: 226 × 67 × 28 mm.
- Container dimensions:  $236 \times 85 \times 52$  mm.

Item #	Description	Format	Colors	Packaging
5110-00	80-Place Rack	5 × 16	-21, -22, -23, -24, -25, -26, -41, -29	5/unit, 4 units/case

### **Assorted Fluorescent Colors:**

Item #s ending in -29 include 5 colors: blue, green, orange, pink, yellow.







### **MCT Storage Racks (Bullet Boxes)**

- Conical based tube positions provide greater support.
- $5 \times 10$  formatting with A to E & 1 to 10 indexing.
- Frosted writing areas.
- Rack comes with lid.

Item #	Description	Dimensions	Packaging
5520-00	50-Place Rack for 1.5/2.0 mL Tubes	139.7 x 71.1 x 53.0 mm	
5530-00	50-Place Rack for 0.5 mL Tubes	121 x 63 x 38 mm	5 racks/unit,
5527-00	21-Place Rack for 5 mL Tubes	139.7 x 71.1 x 61.8 mm	4 units/case
5524-00	Freezer Box (no well or slots)	139.7 x 71.1 x 53.0 mm	

# **Storage & Freezer Racks**

### **Freezer Racks**

- Versatile storage from freezer to bench.
- Stores tubes up to 2.0 mL.
- Suitable for temperatures as low as -90°C.
- Rugged polypropylene.
- High-contrast alphanumeric indexing.

Item #	Description	Dimensions	Colors	Packaging
5510-00	50-Place with Hinged Lid 5 x 10 Format	139 x 86 × 54 mm	-00, -21, -22, -23, -24, -26, -29	
5500-00	81-Place with Lift-Off Lid 9 x 9 Format	125 × 125 × 45 mm (43 mm without Lid)	-00, -21, -22, -23, -24, -26, -29	
5540-00	100-Place with Hinged Lid 10 x 10 Format	151 × 139 × 54 mm	-00, -21, -22, -23, -24, -26, -41, -29	
5504-00	Freezer Box with Lift-Off Lid (no wells or slots)	125 × 125 × 43 mm	-00 Clear	5/unit, 4 units/case
5507-00	49-Well Rack with Lift-Off Lid and Drain Holes	125 × 125 × 43 mm	-00 Clear	
5509-00	81-Well Rack with Lift-Off Lid and Drain Holes	125 × 125 × 45 mm (43 mm without Lid)	-00 Clear	
5509-Z0	81-Well Zylar® Rack with Lift-Off Lid for Temperature Down to -196°C	125 × 125 × 45 mm (43 mm without Lid)	-00 Clear	

### CryoFreeze® Storage Racks

- Tough, durable polycarbonate construction.
- Drains and vents prevent pressure build-up.
- Crystal-clear lid for sample visibility.
- Bright, attractive assorted colors.
- High-contrast alphanumeric indexing.
- Max tube dimensions:
  - 5700-19, 5720-19, and 5750-19: 12 x 49 mm.
  - 5730-19: 12 x 90 mm.

Item #	Description	Format	Dimensions	Packaging
5700-19	25-Place Rack, Assorted Colors (1.0/1.8 mL Tubes)	5 x 5	76 x 76 x 54 mm	
5720-19	81-Place Rack, Assorted Colors (1.0/1.8 mL Tubes)	9 x 9	133 x 133 x 54 mm	5/unit,
5730-19	81-Place, Deep Rack, Assorted Colors (4.5 mL Tubes)	9 x 9	133 x 133 x 95 mm	4 units/case
5750-19	100-Place Rack, Assorted Colors (1.0/1.8 mL Tubes)	10 x 10	133 x 133 x 54 mm	









### **Fluorescent Colors:**

- -21 Blue
- -24 Pink
- -22 Green
- -26 Yellow
- -23 Orange -29 Assorted -41 Black

<sup>2</sup>Assorted Fluorescent Colors: Item #s ending in -29 include 5 colors: blue, green, yellow, orange, pink.





Zylar is a registered trademark of INEOS Styrolution America, LLC.







### PCR Stacking WorkUp Rack — New and Improved!

- Easy stacking.
- Lid clicks into place.
- Stable work platform.
- Accommodates non-skirted, semi-skirted, and skirted 96-well PCR plates.
- Accommodates PCR strip tubes.
- Rugged polypropylene construction.
- Operating temp: -80°C min to 121°C max.
- Assembly comes with lid.
- Rack capacity options:
  - 1 x 96 well PCR plate.
  - 90 x 0.2 mL PCR tubes.
  - 12 x 8-strip tubes.

Item #	Description	Dimensions	Colors	Packaging
5240-09	Stacking 96-Well PCR	138 × 98 × 39 mm,	Assorted	5 racks/unit,
	WorkUp Rack and Lid	30 mm without Lid	Standard <sup>1</sup>	4 units/case



### 96-Place WorkUp Rack

- Working storage rack and lid for PCR processing.
- Standard spacing for strip tubes or plates.
- Snaps into PCR Workstation.
- Assembly comes with lid.

Item #	Description	Dimensions	Colors	Packaging
5230-29	96-Place WorkUp Rack	128 × 87 × 33 mm,	Assorted	5 racks/unit,
	and Lid	17 mm without Lid	Fluorescent <sup>2</sup>	4 units/case

### PCR Workstation and 96-Place WorkUp Rack

- Ideal platform to satisfy all pre- or post-PCR sampling applications.
- Molded alphanumeric indexing for fast and accurate identification.
- Workstation holds all commonly used tube sizes:
  - 32 x 0.2 mL tubes.
  - 24 x 1.5 or 2.0 mL tubes.
  - 16 x 0.5 mL tubes.
  - Removable 96-Place WorkUp Rack holds standard plate tubes or strip tubes.

Item #	Description	Dimensions	Colors	Packaging
5220-29		170 × 110 × 105 mm, 78 mm without Lid	Assorted Fluorescent <sup>2</sup>	5 assemblies/unit, 2 units/case



### <sup>1</sup>Assorted Standard Colors:

Item #s ending in -09 include 5 colors: Blue, Green, Red, Violet, Yellow.

• • •

<sup>2</sup>Assorted Fluorescent Colors:

Item #s ending in -29 include 5 colors: Blue, Green, Yellow, Orange, Pink.



Floater Racks are

Autoclavable

### **Floater Racks**

- Molded-in buoys give exceptional stability in a water bath.
- Can be placed in an ice bath.
- The hinged lid container can be used as a mini-ice bath.
- Capacity:  $24 \times 1.5 / 2.0 \text{ mL}$  and  $15 \times 0.5 \text{ mL}$  tubes.
- Rack comes with lid.

Item #	Description	Max Tube Capacity	Colors	Packaging
5100-43	24-Place Rack in Container	24 × 1.5 or 2.0 mL or 15 × 0.5 mL	Blue	1 rack/unit, 10 units/case

# autoclavable.

### BetaShield™ Racks

- Blocks B-radiation on the bench.
- Minimum wall thickness: 5/8 inch (16 mm).
- 4 x 6 format.
- Maximum tube capacity:  $24 \times 1.5$  or 2.0 mL.
- Rack comes with lid.

Item #	Description	Well Dimensions	Indexing	Packaging
5010-00	24-Place Rack	8 x 24 mm (0.6 mL) 11 x 35 mm (1.5 mL)	A to D & 1 to 6	1 rack/unit, 6 units/case



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Tube Accessories  Cap Locks Cap Openers Pestles  Tubes  0.5, 1.5, and 2 mL Microcentrifuge Tubes 5 mL Microcentrifuge Tubes 15 & 50 mL Tubes CryoFreeze Cryogenic Tubes Dillution Tubes DuraTube & Cap Assemblies Microcentrifuge Tube Accessories Screw Cap Tubes Sterile Assemblies UltraFlux PCR Corbett-Type Strip Tubes and Strip Caps Individual PCR Tubes PCR Strip Tubes & Caps PCR Plates Plate Sealing Options Plate & Film Bundles Vertex Pipette Tips Bulk & Bulk Filtered Filter Tips Low-Retention Tips EcoPac Cleanroom Refill Systems EcoPac Benchtop Refill Systems Macro Volume XL Tips Robotics Tips Robo	23-333

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1002-39 31	2310-00 26
1003-39 31	2311-S0 27
1004-39 31	2312-S0 27
1005-39 31	2313-S0 27
1007-09 31	2314-S0
1110-0029	2315-S0
1110-10 29	2320-00
1110-50	2320-00 26
1210-00 28, 29	2321-S0 27
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1210-10	2322-S0 27
1210-50	2323-S0 27
1260-00 28, 29	2324-S0 27
1270-00 29	2325-S0 27
1310-0029	2330-00 26
1310-10 29	2330-07 26
1310-S0 29	2331-S0 27
1370-00 29	2332-S0 27
1410-00 30	2333-S0 27
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1410-S0 30	2335-S0 27
1410-S7 30	2340-00 26
	2340-07 26
2000 Series - Tubes	2341-S0 27
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2001-00 25	2343-S0 27
2002-00 25	2344-S0 27
2003-0025	2345-S0 27
2004-0025	2530U0026
2005-0024	2641-0B 23
2007-00 24	2630U00 26
2008-00	2640U00
2120-00 26	2830-S0 30
2120-07	2831-S0
2121-S027	2930-S0 30
2122-S0	2931-S0
2123-S0 27	2940-S0
2124-S0	2740 30
	3000 Series - PCP
2125-S0 27	3000 Series - PCR
2125-S0 27 2130-00 26	3102-00 8
2125-S0       27         2130-00       26         2131-S0       27	3102-00 8 3103-00 8
2125-S0       27         2130-00       26         2131-S0       27         2132-S0       27	3102-00 8 3103-00 8 3105-00 8
2125-S0       27         2130-00       26         2131-S0       27         2132-S0       27         2133-S0       27	3102-00       8         3103-00       8         3105-00       8         3106-00       8
2125-S0       27         2130-00       26         2131-S0       27         2132-S0       27         2133-S0       27         2134-S0       27	3102-00       8         3103-00       8         3105-00       8         3106-00       8         3110-00       9
2125-S0       27         2130-00       26         2131-S0       27         2132-S0       27         2133-S0       27         2134-S0       27         2135-S0       27	3102-00       8         3103-00       8         3105-00       8         3106-00       8         3110-00       9         3111-00       8
2125-S0       27         2130-00       26         2131-S0       27         2132-S0       27         2133-S0       27         2134-S0       27         2135-S0       27         2135-S0       27         2140-00       26	3102-00       8         3103-00       8         3105-00       8         3106-00       8         3110-00       9         3111-00       8         3113-00       8
2125-S0     27       2130-00     26       2131-S0     27       2132-S0     27       2133-S0     27       2134-S0     27       2135-S0     27       2140-00     26       2140-07     26	3102-00       8         3103-00       8         3105-00       8         3106-00       8         3110-00       9         3111-00       8         3113-00       8         3132-00       8
2125-S0       27         2130-00       26         2131-S0       27         2132-S0       27         2133-S0       27         2134-S0       27         2135-S0       27         2140-00       26         2140-07       26         2141-S0       27	3102-00       8         3103-00       8         3105-00       8         3106-00       8         3110-00       9         3111-00       8         313-00       8         3133-00       8
2125-S0       27         2130-00       26         2131-S0       27         2132-S0       27         2133-S0       27         2135-S0       27         2140-00       26         2140-07       26         2141-S0       27         2142-S0       27	3102-00       8         3103-00       8         3105-00       8         3106-00       8         3110-00       9         3111-00       8         3113-00       8         3133-00       8         3135-00       8
2125-S0       27         2130-00       26         2131-S0       27         2132-S0       27         2133-S0       27         2134-S0       27         2135-S0       27         2140-00       26         2140-07       26         2141-S0       27         2142-S0       27         2143-S0       27	3102-00       8         3103-00       8         3105-00       8         3106-00       8         3110-00       9         3111-00       8         3132-00       8         3133-00       8         3135-00       8         3136-00       8
2125-S0       27         2130-00       26         2131-S0       27         2132-S0       27         2133-S0       27         2134-S0       27         2135-S0       27         2140-00       26         2140-07       26         2141-S0       27         2142-S0       27         2143-S0       27         2144-S0       27	3102-00       8         3103-00       8         3105-00       8         3106-00       8         3110-00       9         3111-00       8         3132-00       8         3135-00       8         3135-00       8         3136-00       8         3140-00       8
2125-S0       27         2130-00       26         2131-S0       27         2132-S0       27         2133-S0       27         2134-S0       27         2135-S0       27         2140-00       26         2140-07       26         2141-S0       27         2142-S0       27         2143-S0       27         2144-S0       27         2145-S0       27         2145-S0       27	3102-00       8         3103-00       8         3105-00       8         3106-00       8         3110-00       9         3111-00       8         3132-00       8         3135-00       8         3136-00       8         3140-00       8         3145-00       8         3145-00       8
2125-S0       27         2130-00       26         2131-S0       27         2132-S0       27         2133-S0       27         2134-S0       27         2135-S0       27         2140-00       26         2140-07       26         2141-S0       27         2142-S0       27         2143-S0       27         2145-S0       27         2145-S0       27         2210-00       26	3102-00       8         3103-00       8         3105-00       8         3106-00       8         3110-00       9         3111-00       8         3132-00       8         3135-00       8         3136-00       8         3140-00       8         3145-00       8         3145-00       8         3145-00       9
2125-S0       27         2130-00       26         2131-S0       27         2132-S0       27         2133-S0       27         2134-S0       27         2135-S0       27         2140-00       26         2140-07       26         2141-S0       27         2142-S0       27         2143-S0       27         2144-S0       27         2145-S0       27         2210-00       26         2211-S0       27	3102-00       8         3103-00       8         3105-00       8         3106-00       8         3110-00       9         3111-00       8         3113-00       8         3132-00       8         3135-00       8         3136-00       8         3140-00       8         3145-00       8         3148-00       9         3210-00       9
2125-S0       27         2130-00       26         2131-S0       27         2132-S0       27         2133-S0       27         2134-S0       27         2135-S0       27         2140-00       26         2140-07       26         2141-S0       27         2142-S0       27         2143-S0       27         2145-S0       27         2145-S0       27         2210-00       26         2211-S0       27         2212-S0       27	3102-00       8         3103-00       8         3105-00       8         3106-00       8         3110-00       9         3111-00       8         3113-00       8         3132-00       8         3135-00       8         3136-00       8         3140-00       8         3145-00       8         3145-00       9         3210-00       9         3220-00       9
2125-S0       27         2130-00       26         2131-S0       27         2132-S0       27         2133-S0       27         2134-S0       27         2135-S0       27         2140-00       26         2140-07       26         2141-S0       27         2142-S0       27         2143-S0       27         2145-S0       27         2210-00       26         2211-S0       27         2212-S0       27         2213-S0       27	3102-00       8         3103-00       8         3105-00       8         3106-00       8         3110-00       9         3111-00       8         3132-00       8         3135-00       8         3135-00       8         3136-00       8         3140-00       8         3145-00       8         3145-00       9         3210-00       9         3220-00       9         3225-00       9
2125-SO       27         2130-00       26         2131-SO       27         2132-SO       27         2133-SO       27         2135-SO       27         2135-SO       27         2140-00       26         2141-SO       27         2142-SO       27         2143-SO       27         2144-SO       27         2145-SO       27         2210-00       26         2211-SO       27         2212-SO       27         2213-SO       27         2214-SO       27         2213-SO       27         2214-SO       27         2214-SO       27         2214-SO       27         2214-SO       27         2214-SO       27	3102-00       8         3103-00       8         3105-00       8         3106-00       8         3110-00       9         3111-00       8         3132-00       8         3135-00       8         3135-00       8         3136-00       8         3140-00       8         3145-00       8         3145-00       9         320-00       9         3220-00       9         3225-00       7
2125-S0       27         2130-00       26         2131-S0       27         2132-S0       27         2133-S0       27         2135-S0       27         2135-S0       27         2140-00       26         2140-07       26         2141-S0       27         2142-S0       27         2143-S0       27         2145-S0       27         2210-00       26         2211-S0       27         2212-S0       27         2213-S0       27         2214-S0       27         2214-S0       27         2215-S0       27         2215-S0       27         2215-S0       27	3102-00       8         3103-00       8         3105-00       8         3106-00       8         3110-00       9         3111-00       8         3113-00       8         3132-00       8         3135-00       8         3136-00       8         3140-00       8         3145-00       8         3145-00       9         3210-00       9         3225-00       9         3235-00       7         3240-00       7
2125-S0       27         2130-00       26         2131-S0       27         2132-S0       27         2133-S0       27         2135-S0       27         2135-S0       27         2140-00       26         2140-07       26         2141-S0       27         2142-S0       27         2143-S0       27         2145-S0       27         2210-00       26         2211-S0       27         2212-S0       27         2213-S0       27         2214-S0       27         2214-S0       27         2215-S0       27         2215-S0       27         2215-S0       27         2250-00       26	3102-00       8         3103-00       8         3105-00       8         3106-00       8         3110-00       9         3111-00       8         3113-00       8         3132-00       8         3135-00       8         3136-00       8         3140-00       8         3140-00       8         3145-00       9         3210-00       9         3220-00       9         3225-00       9         3235-00       7         3245-00       7         3245-00       7, 11
2125-S0       27         2130-00       26         2131-S0       27         2132-S0       27         2133-S0       27         2134-S0       27         2135-S0       27         2145-S0       27         2140-00       26         2141-S0       27         2142-S0       27         2143-S0       27         2145-S0       27         2210-00       26         2211-S0       27         2213-S0       27         2214-S0       27         2215-S0       27         2215-S0       27         2215-S0       27         2210-00       26         220-00       26         220-07       26	3102-00       8         3103-00       8         3105-00       8         3106-00       8         3110-00       9         3111-00       8         3113-00       8         3132-00       8         3135-00       8         3136-00       8         3140-00       8         3140-00       8         3188-00       9         3210-00       9         3225-00       9         3235-00       7         3240-00       7         3245-00       7, 11         3246-00       7
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2125-SO       27         2130-00       26         2131-SO       27         2132-SO       27         2133-SO       27         2134-SO       27         2135-SO       27         2140-00       26         2140-07       26         2141-SO       27         2142-SO       27         2143-SO       27         2145-SO       27         2215-SO       27         2211-SO       27         2212-SO       27         2215-SO       27         2215-SO       27         2215-SO       27         2220-00       26         2221-SO       26         2221-SO       27         2225-SO       27         2225-SO       27	3102-00       8         3103-00       8         3105-00       8         3106-00       8         3110-00       9         3111-00       8         3113-00       8         3132-00       8         3135-00       8         3136-00       8         3146-00       8         3140-00       8         3145-00       9         3210-00       9         3225-00       9         3235-00       7         3240-00       7         3245-00       7         3247-00       7         3247-00       7         3248-00       7         3248-00       7         3248-00       7         3248-00       7         3248-00       7         3248-00       7         3248-00       7         3248-00       7         3248-00       7         3248-00       7         3248-00       7         3248-00       7         3248-00       7         3248-00       7
2125-SO       27         2130-00       26         2131-SO       27         2132-SO       27         2133-SO       27         2134-SO       27         2135-SO       27         2140-00       26         2140-07       26         2141-SO       27         2142-SO       27         2143-SO       27         2145-SO       27         2210-00       26         2211-SO       27         2212-SO       27         2215-SO       27         2215-SO       27         2215-SO       27         2221-SO       26         2220-07       26         2221-SO       27         2221-SO       27         2221-SO       27         2221-SO       27         2223-SO       27	3102-00       8         3103-00       8         3105-00       8         3106-00       8         3110-00       9         3111-00       8         3113-00       8         3132-00       8         3135-00       8         3136-00       8         3140-00       8         3145-00       8         3145-00       9         3210-00       9         3220-00       9         3235-00       7         3245-00       7         3245-00       7         3247-00       7         3248-00       7         3248-00       7         3248-00       7         3248-00       7         3248-00       7         3248-00       7         3248-00       7         3248-00       7         3248-00       7         3248-00       7         3248-00       7         3248-00       7         3248-00       7         3248-00       7         3248-00       7         3248-00 </td
2125-SO       27         2130-00       26         2131-SO       27         2132-SO       27         2133-SO       27         2134-SO       27         2135-SO       27         2140-00       26         2140-07       26         2141-SO       27         2142-SO       27         2143-SO       27         2145-SO       27         2210-00       26         2211-SO       27         2212-SO       27         2213-SO       27         2215-SO       27         2220-00       26         2220-07       26         2221-SO       27         2222-SO       27         223-SO       27         2224-SO       27     <	3102-00       8         3103-00       8         3105-00       8         3106-00       8         3110-00       9         3111-00       8         3113-00       8         3132-00       8         3135-00       8         3136-00       8         3140-00       8         3145-00       8         3145-00       9         3210-00       9         3220-00       9         3225-00       7         3240-00       7         3245-00       7, 11         3246-00       7, 11         3248-00       7, 11         3248-40       11         3310-00       9
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2125-SO       27         2130-00       26         2131-SO       27         2132-SO       27         2133-SO       27         2134-SO       27         2135-SO       27         2140-00       26         2140-07       26         2141-SO       27         2142-SO       27         2143-SO       27         2145-SO       27         2210-00       26         2211-SO       27         2213-SO       27         2214-SO       27         2215-SO       27         2215-SO       27         2220-00       26         2221-SO       27         2222-SO       27         2224-SO       27         2225-SO       27         2225-SO       27         2230-00       26	3102-00       8         3103-00       8         3105-00       8         3106-00       8         3110-00       9         3111-00       8         3113-00       8         3132-00       8         3135-00       8         3136-00       8         3140-00       8         3145-00       8         3188-00       9         3210-00       9         3225-00       9         3235-00       7         3240-00       7         3245-00       7         3247-00       7         3248-00       7         3248-00       7         3300-00       9         3320-00       9         3400-00       11
2125-SO       27         2130-00       26         2131-SO       27         2132-SO       27         2133-SO       27         2134-SO       27         2135-SO       27         2140-00       26         2140-07       26         2141-SO       27         2142-SO       27         2143-SO       27         2145-SO       27         2210-00       26         2211-SO       27         2213-SO       27         2214-SO       27         2215-SO       27         2215-SO       27         2220-00       26         2221-SO       27         2222-SO       27         2225-SO       27         2225-SO       27         2230-00       26         2230-07       26         2230-07       26	3102-00       8         3103-00       8         3105-00       8         3106-00       8         3110-00       9         3111-00       8         3113-00       8         3132-00       8         3135-00       8         3136-00       8         3140-00       8         3140-00       8         3188-00       9         3210-00       9         3225-00       9         3235-00       7         3240-00       7         3245-00       7         3247-00       7         3248-00       7         3310-00       9         3320-00       9         3400-00       11         3400-00       11
2125-SO       27         2130-00       26         2131-SO       27         2132-SO       27         2133-SO       27         2134-SO       27         2135-SO       27         2140-00       26         2140-07       26         2141-SO       27         2142-SO       27         2143-SO       27         2145-SO       27         2210-00       26         2211-SO       27         2212-SO       27         2213-SO       27         2215-SO       27         2220-00       26         2221-SO       27         2222-SO       27         2223-SO       27         2225-SO       27         2230-00       26         2230-07       26         2231-SO       27	3102-00       8         3103-00       8         3105-00       8         3106-00       8         3110-00       9         3111-00       8         3113-00       8         3132-00       8         3135-00       8         3136-00       8         3146-00       8         3146-00       8         3188-00       9         3210-00       9         3225-00       9         3235-00       7         3246-00       7         3247-00       7         3248-00       7         3248-00       7         3310-00       9         3320-00       9         3320-00       9         3400-00       11         3400-00       11         3401-00       11
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