

WHEATON[®]

Vial Guide

For the Smaller Samples in Life





WHEATON Vials

Vials

WHEATON offers the most comprehensive line of ampules, vials and accessories for the laboratory research market. Sample vials, fabricated from high-quality glass tubing, offer uniform sidewall and bottom thickness. Liquid scintillation vials are the original scintillation vials invented by WHEATON over 60 years ago. Manufactured from low potassium borosilicate glass, PET and HPDE, the WHEATON line of vials is the largest and most diverse in the industry. High recovery vials feature a conical interior that allows for maximum retrieval of a sample with a syringe. Certain vial styles can be used with automated compound storage systems and easily bar coded using a 2D or linear bar code format. WHEATON CryoELITE® Cryogenic Vials offer unrivaled caps that exceed DOT and IATA regulations.

When you are looking for a high-quality and dependable vial, WHEATON can provide the best product for your application. WHEATON can also accommodate the custom design and manufacturing of vials. Additionally we offer bar coding, critical cleaning, and surface treatment services.

About WHEATON®

WHEATON admires those people who devote their life to science. It's this admiration that drives us to design and deliver today's most innovative solutions for the laboratory research, diagnostic packaging and specialty pharmaceuticals industries. It's this admiration that motivates us to offer the best customer service experience and most dependable products in the industry. And, it's with admiration that we stand behind those people who help move the world forward one discovery, one sample at a time. The WHEATON name means more than a legacy of the highest quality products and services; it stands for a commitment to honor the effort of all scientists... WHEATON is the proven solutions for science.

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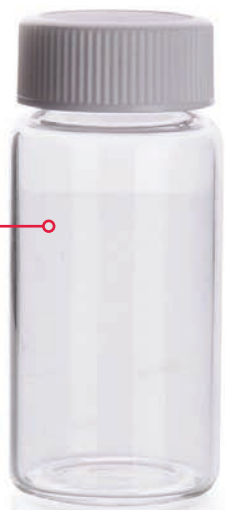
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Top Vial Selections

Liquid Scintillation

- Made from WHEATON 180 low potassium borosilicate glass that conforms to USP Type I and ASTM E 438 Type I, Class A requirements
- Background counts are consistent and low, ultraviolet transmission is high
- Screw caps can be purchased separately



Sample Vial

- Clear vials conform to USP Type I and ASTM E 438 Type I, Class A requirements
- Amber vials made from borosilicate glass that conforms to USP Type I requirements for light transmission to protect light-sensitive products
- Lab File® with partitioned trays provides an easy way to inventory samples or to store empty vials



High Recovery V-Vials

- Conical interior provides downward drainage for maximum sample retrieval
- Ideal for small-scale reactions, centrifugation, storage, packaging and shipping
- Low particulate packaging protects against contamination during transportation and storage

Serum Vials

- Clear vials manufactured from low extractable borosilicate glass that conforms to USP Type I and ASTM E 438 Type I, Class A requirements
- Amber glass conforms to USP Type I requirements to protect light-sensitive samples
- Tubular design provides excellent clarity and dimensional consistency from vial to vial



CryoELITE Vial

- Lot certified RNase / DNase and endotoxin free and non-pyrogenic providing assurance for sample integrity
- Unrivaled cap seal exceeds DOT and IATA regulations ensuring ultimate protection of samples during transportation and demanding freeze-thaw handling
- Freestanding and round bottom styles available



Select from Glass, HDPE and PET Vials

- Packaged in 5 utility trays with each partition tray holding 100 vials
- Utility trays serve as a way to store your samples
- For additional organization of your vials, use the WHEATON Vial Rack 66022-525 or M-T Vial File® 71000-068
- Cases with 1000 vials are packed in a single plastic bag with caps in a separate bag

Glass

- Made from WHEATON 180 low potassium borosilicate glass that conforms to USP Type I and ASTM E 438 Type I, Class A requirements
- Background counts are consistent and low, ultraviolet transmission is high

HDPE

- Made from high density polyethylene with lightweight walls for increased counting efficiency
- Manufactured to precise tolerances to avoid jamming

PET

- Vials offer low permeability to solvents and minimal background counts
- Clarity of glass with the safety of plastic
- Vials can be safely incinerated; no harmful gas is generated

Cap Liner Guide

| Liner Material | Description | Applications |
|--------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Foamed Polyethylene (PE Foam) | A one piece, three ply coextruded liner consisting of both foamed and solid LDPE. The foam core is sandwiched with solid clear PE. | General Purpose: Broad applications base. Good chemical resistance to acids, alkalis, solvents, alcohols, oils, household cosmetics and aqueous products. Poor for hydrocarbon solvents. Liner provides tight seal. |
| Pulp / Metal Foil | Aluminum foil bonded to pulp board. | Good barrier properties and resistance to hydrocarbons, oils, ketones and alcohols. Not good for acids or alkalis. |
| Polyethylene Cone (PE Cone) | Manufactured from polyethylene (LDPE). The unique cone design provides a wedge type seal that not only seals across the top but also across the inside diameter. | Unique problem solving type of liner. This liner is stress crack resistant and offers superior torque retention and excellent sealing characteristics. It is recommended that this liner be tested prior to use for leak seal. |

Note: Closures and liners are designed for a variety of applications. Product performance can vary depending on conditions. It is recommended that proper tests be performed to determine the best liner for the application.



Liquid Scintillation Vials

| Cat. No. | Size (mL) | Vial Material | Cap Material | Liner Material | Cap Size | Dia. x H (mm)* | Qty / Case |
|---------------------------------|-----------|---------------|---------------|---------------------|----------|----------------|------------|
| Caps Attached to Vials | | | | | | | |
| 66021-452 | 20 | Glass | Polypropylene | Foamed Polyethylene | 22-400 | 28 x 61 | 500 |
| 66021-453 | 20 | Glass | Polypropylene | Metal Foil / Pulp | 22-400 | 28 x 61 | 500 |
| 66021-497 | 20 | Glass | Urea | Metal Foil / Cork | 22-400 | 28 x 61 | 500 |
| 66021-533 | 20 | Glass | Urea | Polyethylene Cone | 22-400 | 28 x 61 | 500 |
| 66021-577 | 20 | Glass | Urea | Polyethylene Disc | 22-400 | 28 x 61 | 500 |
| 66021-600 | 20 | Glass | Polypropylene | Foamed Polyethylene | 24-400 | 28 x 61 | 500 |
| 56941-386 | 20 | Glass | Polypropylene | Metal Foil / Pulp | 24-400 | 28 x 61 | 500 |
| 66021-602 | 20 | Glass | Urea | Metal Foil / Cork | 24-400 | 28 x 61 | 500 |
| 66021-624 | 20 | Glass | Urea | Polyethylene Disc | 24-400 | 28 x 61 | 500 |
| 66021-677 | 20 | HDPE | Polypropylene | Foamed Polyethylene | 22-400 | 27 x 61 | 500 |
| 66021-679 | 20 | HDPE | Polypropylene | Metal Foil / Pulp | 22-400 | 27 x 61 | 500 |
| 66021-680 | 20 | HDPE | Urea | Metal Foil / Cork | 22-400 | 27 x 61 | 500 |
| 66021-690 | 20 | HDPE | Polyethylene | Linerless | 22-400 | 27 x 61 | 500 |
| 66021-692 | 20 | HDPE | Urea | Polyethylene Cone | 22-400 | 27 x 61 | 500 |
| 66021-735 | 20 | PET | Polypropylene | Foamed Polyethylene | 22-400 | 27 x 61 | 500 |
| 66021-736 | 20 | PET | Polypropylene | Metal Foil / Pulp | 22-400 | 27 x 61 | 500 |
| 66021-737 | 20 | PET | Urea | Metal Foil / Cork | 22-400 | 27 x 61 | 500 |
| 66021-738 | 20 | PET | Polyethylene | Linerless | 22-400 | 27 x 61 | 500 |
| 66021-741 | 20 | PET | Urea | Polyethylene Cone | 22-400 | 27 x 61 | 500 |
| Caps Packaged Separately | | | | | | | |
| 66021-645 | 20 | Glass | Polypropylene | Foamed Polyethylene | 22-400 | 28 x 61 | 500 |
| 66021-646 | 20 | Glass | Polypropylene | Metal Foil / Pulp | 22-400 | 28 x 61 | 500 |
| 66021-657 | 20 | Glass | Urea | Metal Foil / Cork | 22-400 | 28 x 61 | 500 |
| 66021-668 | 20 | Glass | Urea | Polyethylene Cone | 22-400 | 28 x 61 | 500 |
| 66021-675 | 20 | Glass | Polypropylene | Foamed Polyethylene | 24-400 | 28 x 61 | 500 |
| 56941-513 | 20 | Glass | Polypropylene | Metal Foil / Pulp | 24-400 | 28 x 61 | 500 |
| 16300-219 | 20 | HDPE | Polypropylene | Foamed Polyethylene | 22-400 | 27 x 61 | 500 |
| 16300-224 | 20 | HDPE | Polypropylene | Foamed Polyethylene | 22-400 | 27 x 61 | 1000 |
| 16300-220 | 20 | HDPE | Polypropylene | Metal Foil / Pulp | 22-400 | 27 x 61 | 500 |
| 66021-704 | 20 | HDPE | Polypropylene | Metal Foil / Pulp | 22-400 | 27 x 61 | 1000 |
| 16300-222 | 20 | HDPE | Polyethylene | Linerless | 22-400 | 27 x 61 | 500 |
| 66021-726 | 20 | HDPE | Polyethylene | Linerless | 22-400 | 27 x 61 | 1000 |
| 66021-715 | 20 | HDPE | Urea | Metal Foil / Cork | 22-400 | 27 x 61 | 1000 |
| 66021-695 | 20 | HDPE | Urea | Polyethylene Cone | 22-400 | 27 x 61 | 500 |
| 16300-228 | 20 | HDPE | Urea | Polyethylene Cone | 22-400 | 27 x 61 | 1000 |
| 16300-248 | 20 | PET | Polypropylene | Foamed Polyethylene | 22-400 | 27 x 61 | 500 |
| 16300-234 | 20 | PET | Polypropylene | Foamed Polyethylene | 22-400 | 27 x 61 | 1000 |
| 56947-394 | 20 | PET | Polypropylene | Metal Foil / Pulp | 22-400 | 27 x 61 | 500 |
| 56947-382 | 20 | PET | Polypropylene | Metal Foil / Pulp | 22-400 | 27 x 61 | 1000 |
| 16300-241 | 20 | PET | Polyethylene | Linerless | 22-400 | 27 x 61 | 500 |
| 16300-236 | 20 | PET | Polyethylene | Linerless | 22-400 | 27 x 61 | 1000 |
| 16300-240 | 20 | PET | Urea | Metal Foil / Cork | 22-400 | 27 x 61 | 500 |
| 16300-235 | 20 | PET | Urea | Metal Foil / Cork | 22-400 | 27 x 61 | 1000 |
| 16300-242 | 20 | PET | Urea | Polyethylene Cone | 22-400 | 27 x 61 | 500 |
| 16300-247 | 20 | PET | Urea | Polyethylene Cone | 22-400 | 27 x 61 | 1000 |

*Measurement taken with cap attached.

Liquid Scintillation Vial

(Without Screw Caps)

- Made from WHEATON 180 low potassium borosilicate glass that conforms to USP Type I and ASTM E 438 Type I, Class A requirements
- Background counts are consistent and low, ultraviolet transmission is high
- Screw caps can be purchased separately
- Packaged in 5 utility trays with each partitioned tray holding 100 vials each
- Utility trays serve as a way to store your samples
- For additional organization of your vials use the WHEATON Vial Rack 66022-525 or M-T Vial File® 71000-068



| Cat. No. | Size (mL) | Vial Material | Cap Size | Dia. x H (mm) | Qty / Case |
|-----------|-----------|---------------|----------|---------------|------------|
| 56941-604 | 20 | Glass | 22-400 | 28 x 57 | 500 |

Liquid Scintillation Vial Screw Caps

- Screw caps for WHEATON liquid scintillation vials
- Use as replacement caps or for vials that are provided without caps
- Choose the right size screw cap for your vial
- Select cap and liner material for your application
- Not autoclavable



| Cat. No. | Cap Size (mm) | Cap Material | Cap Liner Material | Qty / Case |
|-----------|---------------|---------------|--------------------|------------|
| 66021-748 | 15-425 | Urea | Metal Foil | 1000 |
| 66021-840 | 22-400 | Polypropylene | Metal Foil | 1000 |
| 66021-759 | 22-400 | Urea | Metal Foil | 1000 |
| 66021-817 | 22-400 | Urea | Polyethylene Disc | 1000 |
| 66021-781 | 22-400 | Urea | PE Cone | 1000 |
| 66021-861 | 22-400 | Polyethylene | Linerless | 1000 |
| 66021-252 | 24-400 | Polypropylene | Foil / Pulp | 1000 |
| 66021-760 | 24-400 | Urea | Metal Foil | 1000 |
| 66021-828 | 24-400 | Urea | Polyethylene Disc | 1000 |

Scintillation Vial, HDPE



Quarter Turn Cap



Quarter Turn Hanging Cap



Hanging Cap Sample with 20mL Vial

- 6mL vial made from high density polyethylene
- Hanging cap allows for suspending vial in 20mL vial with 22mm neck finish
- Dimensions with cap attached: 17mm x 57mm
- For additional organization of your vials use the WHEATON Vial Rack 66022-569

| Cat. No. | Size (mL) | Cap Type | Cap Material | Liner Material | Qty / Case |
|-----------|-----------|----------------------------|---------------|----------------|------------|
| 66021-249 | 6 | Quarter Turn | Polypropylene | Linerless | 1000 |
| 66021-250 | 6 | Quarter Turn Hanging Style | Polypropylene | Linerless | 1000 |

Diagnostic Vials

- Borosilicate glass meets USP Type I
- Alternative to serum bottles and vials
- Screw thread design eliminates need for crimping tools
- Ideal for lyophilization
- Fits with I-Loc™ closure or screw cap with thin flange stopper
- Tubular design provides excellent clarity and dimensional consistency from vial to vial
- Heavy walled glass provides impact resistance



| Cat. No. | Color | Size (mL) | Dia. x H (mm) | Cap Size | Qty / Case |
|-----------|-------|-----------|---------------|----------|------------|
| 10070-712 | Clear | 5 | 22 x 38 | 20-400 | 480 |
| 10070-714 | Amber | 5 | 22 x 38 | 20-400 | 480 |
| 10070-716 | Clear | 10 | 22 x 55 | 20-400 | 480 |
| 10068-202 | Amber | 10 | 22 x 55 | 20-400 | 480 |
| 10068-204 | Clear | 20 | 30 x 52 | 20-400 | 480 |
| 10068-206 | Amber | 20 | 30 x 52 | 20-400 | 480 |
| 10068-208 | Clear | 30 | 30 x 69 | 20-400 | 288 |
| 10068-210 | Amber | 30 | 30 x 69 | 20-400 | 288 |

I-Loc™ Closure

- For use with Screw Neck Diagnostic Vials
- Advantages of an aluminum seal with the convenience of a screw cap
- Polypropylene screw cap with gray bromobutyl / 50 stopper
- Autoclavable



| Cat. No. | Color | Cap Size | Qty / Case |
|-----------|--------|----------|------------|
| 16149-151 | Black | 20-400 | 100 |
| 16149-153 | White | 20-400 | 100 |
| 16149-155 | Red | 20-400 | 100 |
| 16149-157 | Blue | 20-400 | 100 |
| 16149-159 | Yellow | 20-400 | 100 |

Screw Caps for Screw Neck Diagnostic Vials



- Polypropylene screw caps in 5 colors
- Use with 224100-203 or W224100-185 thin flange stopper
- Autoclavable

| Cat. No. | Cap Size | Cap Style | Color | Autoclavable | Qty / Case |
|-----------|----------|-----------|--------|--------------|------------|
| 15507-134 | 20-400 | Solid Top | Black | Yes | 300 |
| 15507-136 | 20-400 | Solid Top | White | Yes | 300 |
| 15507-140 | 20-400 | Solid Top | Blue | Yes | 300 |
| 15507-142 | 20-400 | Solid Top | Yellow | Yes | 300 |
| 15507-124 | 20-400 | Open-Top | Black | Yes | 300 |
| 15507-126 | 20-400 | Open-Top | White | Yes | 300 |
| 15507-128 | 20-400 | Open-Top | Red | Yes | 300 |
| 15507-130 | 20-400 | Open-Top | Blue | Yes | 300 |
| 15507-132 | 20-400 | Open-Top | Yellow | Yes | 300 |






Stopper, Thin Flange

- Use with screw caps for Screw Neck Diagnostic Vials
- Autoclavable

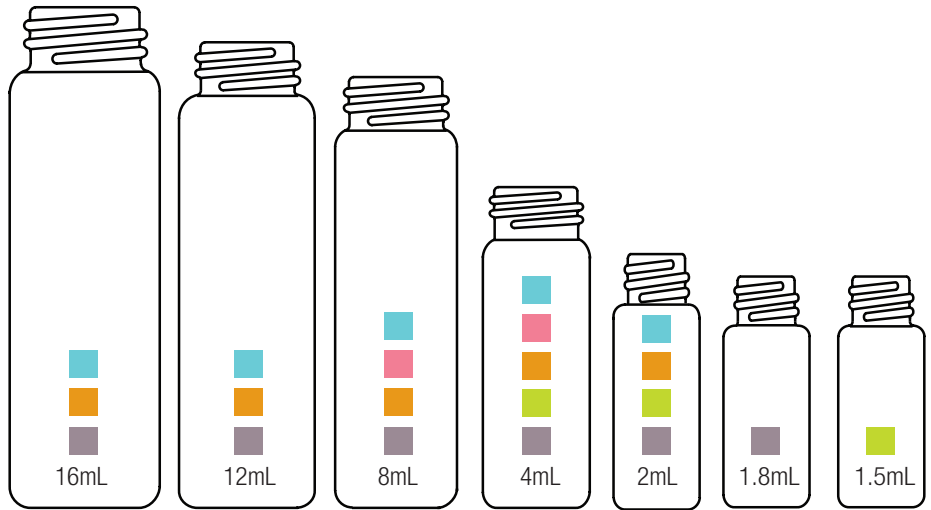


| Cat. No. | Stopper Size | Qty / Case |
|-----------|------------------------------------------------|------------|
| 15507-144 | 20mm 3-Leg Lyophilization Gray Chlorbutyl / 55 | 300 |
| 10796-548 | 20mm Thin Flange Snap-On Gray Chlorbutyl / 50 | 1000 |

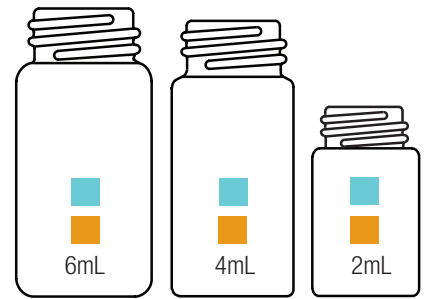
Sample Vial Sizer Guide (Approximate Size)

-  Sample Vial in Lab File® (w/ cap attached)
-  Sample Vial in Lab File® w/ Writing Patch (w/ cap attached)
-  Sample Vial in Lab File® (w/o cap attached)
-  Sample Vial in Vial File® (w/ cap attached)
-  E-C Sample Vial

Standard Sample Vials



Shorty Vials®



Standard Sample Vials



Sample Vials in Lab File® (With Caps Attached)



Shorty Vials®



Standard Clear and Amber Vials

- Sample vials with caps attached to vial help maintain cleanliness
- Lab File® with partitioned trays provides an easy way to inventory samples or to store empty vials
- Clear vials made from low extractable borosilicate glass to provide superior chemical resistance
- Clear vials conform to USP Type I and ASTM E 438 Type I, Class A requirements
- Amber vials made from borosilicate glass that conforms to USP Type I requirements for light transmission to protect light-sensitive products
- Shorty Vials® feature a low profile for greater stability and less dead volume
- 14B rubber lined black phenolic screw cap for aqueous samples
- PTFE / 14B rubber lined black phenolic screw cap for organic samples
- Replacement caps can be purchased separately
- Vials and caps are autoclavable

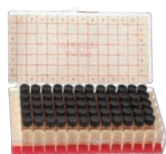
| Cat. No. | Color | Size (mL) | Size (dr) | Cap Material | Cap Description | Liner Material | Cap Size | Dia. x H (mm) | Qty / Case | Fits M-T File® | Fits Vial Rack |
|------------------------------------------------------------|-------|-----------|-----------|----------------|-----------------|-------------------|----------|---------------|------------|----------------|----------------|
| Shorty Vials with Caps Attached | | | | | | | | | | | |
| 80076-588 | Clear | 2 | .5 | Black Phenolic | Solid Top | 14B Rubber | 13-425 | 15 x 31 | 200 | 66011-325 | 66022-523 |
| 80076-594 | Clear | 2 | .5 | Black Phenolic | Solid Top | PTFE / 14B Rubber | 13-425 | 15 x 31 | 200 | 66011-325 | 66022-523 |
| 80076-590 | Clear | 4 | 1 | Black Phenolic | Solid Top | 14B Rubber | 15-425 | 17 x 41 | 200 | — | 66022-569 |
| 80076-596 | Clear | 4 | 1 | Black Phenolic | Solid Top | PTFE / 14B Rubber | 15-425 | 17 x 41 | 200 | — | 66022-569 |
| 80076-592 | Clear | 6 | 1.5 | Black Phenolic | Solid Top | 14B Rubber | 15-425 | 19 x 43 | 200 | — | — |
| 80076-598 | Clear | 6 | 1.5 | Black Phenolic | Solid Top | PTFE / 14B Rubber | 15-425 | 19 x 43 | 200 | — | — |
| Standard Vials with Caps Attached | | | | | | | | | | | |
| 66011-256 | Clear | 2 | .5 | Black Phenolic | Solid Top | 14B Rubber | 8-425 | 12 x 38 | 288 | 66011-303 | 66022-478 |
| 14230-820 | Clear | 2 | .5 | Black Phenolic | Solid Top | PTFE / 14B Rubber | 8-425 | 12 x 38 | 288 | 66011-303 | 66022-478 |
| 66011-937 | Amber | 2 | .5 | Black Phenolic | Solid Top | 14B Rubber | 8-425 | 12 x 38 | 288 | 66011-303 | 66022-478 |
| 14230-832 | Amber | 2 | .5 | Black Phenolic | Solid Top | PTFE / 14B Rubber | 8-425 | 12 x 38 | 288 | 66011-303 | 66022-478 |
| 66021-908 | Clear | 2 | .5 | White Urea | Solid Top | Metal Foil / Pulp | 8-425 | 12 x 38 | 288 | 66011-303 | 66022-478 |
| 66011-278 | Clear | 4 | 1 | Black Phenolic | Solid Top | 14B Rubber | 13-425 | 15 x 48 | 144 | 66011-325 | 66022-523 |
| 14230-822 | Clear | 4 | 1 | Black Phenolic | Solid Top | PTFE / 14B Rubber | 13-425 | 15 x 48 | 144 | 66011-325 | 66022-523 |
| 66011-948 | Amber | 4 | 1 | Black Phenolic | Solid Top | 14B Rubber | 13-425 | 15 x 48 | 144 | 66011-325 | 66022-523 |
| 14230-834 | Amber | 4 | 1 | Black Phenolic | Solid Top | PTFE / 14B Rubber | 13-425 | 15 x 48 | 144 | 66011-325 | 66022-523 |
| 66011-290 | Clear | 8 | 2 | Black Phenolic | Solid Top | 14B Rubber | 15-425 | 17 x 63 | 144 | 71000-066 | 66022-569 |
| 14230-824 | Clear | 8 | 2 | Black Phenolic | Solid Top | PTFE / 14B Rubber | 15-425 | 17 x 63 | 144 | 71000-066 | 66022-569 |
| 66011-959 | Amber | 8 | 2 | Black Phenolic | Solid Top | 14B Rubber | 15-425 | 17 x 63 | 144 | 71000-066 | 66022-569 |
| 14230-836 | Amber | 8 | 2 | Black Phenolic | Solid Top | PTFE / 14B Rubber | 15-425 | 17 x 63 | 144 | 71000-066 | 66022-569 |
| 66011-314 | Clear | 12 | 3 | Black Phenolic | Solid Top | 14B Rubber | 15-425 | 19 x 68 | 144 | — | — |
| 14230-826 | Clear | 12 | 3 | Black Phenolic | Solid Top | PTFE / 14B Rubber | 15-425 | 19 x 68 | 144 | — | — |
| 66011-336 | Clear | 16 | 4 | Black Phenolic | Solid Top | 14B Rubber | 18-400 | 21 x 73 | 144 | — | — |
| 66011-336 | Clear | 16 | 4 | Black Phenolic | Solid Top | PTFE / 14B Rubber | 18-400 | 21 x 73 | 144 | — | — |
| 66011-405 | Clear | 20 | 5 | Black Phenolic | Solid Top | 14B Rubber | 24-400 | 28 x 60 | 72 | 71000-068 | 66022-525 |
| 14231-552 | Clear | 20 | 5 | Black Phenolic | Solid Top | PTFE / 14B Rubber | 24-400 | 28 x 60 | 72 | 71000-068 | 66022-525 |
| 80086-690 | Amber | 20 | 5 | Black Phenolic | Solid Top | 14B Rubber | 24-400 | 28 x 60 | 72 | 71000-068 | 66022-525 |
| 80076-572 | Amber | 20 | 5 | Black Phenolic | Solid Top | PTFE / 14B Rubber | 24-400 | 28 x 60 | 72 | 71000-068 | 66022-525 |
| 66011-358 | Clear | 24 | 6 | Black Phenolic | Solid Top | 14B Rubber | 20-400 | 23 x 88 | 144 | — | 66022-556 |
| 14230-830 | Clear | 24 | 6 | Black Phenolic | Solid Top | PTFE / 14B Rubber | 20-400 | 23 x 88 | 144 | — | 66022-556 |
| 66014-236 | Clear | 25 | 6.76 | Black Phenolic | Solid Top | 14B Rubber | 24-400 | 28 x 73 | 72 | — | 66022-525 |
| 14231-554 | Clear | 25 | 6.76 | Black Phenolic | Solid Top | PTFE / 14B Rubber | 24-400 | 28 x 73 | 72 | — | 66022-525 |
| 66014-389 | Clear | 40 | 10.8 | Black Phenolic | Solid Top | 14B Rubber | 24-400 | 28 x 98 | 72 | — | 66022-525 |
| 14231-556 | Clear | 40 | 10.8 | Black Phenolic | Solid Top | PTFE / 14B Rubber | 24-400 | 28 x 98 | 72 | — | 66022-525 |
| 80086-692 | Amber | 40 | 10.8 | Black Phenolic | Solid Top | 14B Rubber | 24-400 | 28 x 98 | 72 | — | 66022-525 |
| 80076-574 | Amber | 40 | 10.8 | Black Phenolic | Solid Top | PTFE / 14B Rubber | 24-400 | 28 x 98 | 72 | — | 66022-525 |
| Standard Vials with Writing Patch and Caps Attached | | | | | | | | | | | |
| 66011-372 | Clear | 4 | 1 | Black Phenolic | Solid Top | 14B Rubber | 13-425 | 15 x 48 | 144 | 66011-325 | 66022-523 |
| 14007-176 | Clear | 8 | 2 | Black Phenolic | Solid Top | 14B Rubber | 15-425 | 17 x 63 | 144 | 71000-066 | 66022-569 |

Sample Vials in Lab File® (Without Caps)

- Sample vials packaged in partitioned trays without caps
- Partitioned trays provide an easy way to inventory samples or to store empty vials
- Clear vials made from low extractable borosilicate glass that provides superior chemical resistance
- Clear vials conform to USP Type I and ASTM E 438 Type I, Class A requirements
- Amber vials made from borosilicate glass that conforms to USP Type I requirements for light transmission to protect light-sensitive products
- Shorty Vials® feature a low profile for greater stability and less dead volume
- Screw caps can be purchased separately
- Vials are autoclavable

| Cat. No. | Color | Size (mL) | Size (dr) | Cap Size | Dia. x H (mm) | Qty / Case | Fits M-T File® | Fits Vial Rack |
|------------------------------------|-------|-----------|-----------|----------|---------------|------------|----------------|----------------|
| Shorty Vials without Caps | | | | | | | | |
| 66011-868 | Clear | 2 | .5 | 13-425 | 15 x 28 | 200 | 66011-325 | 66022-523 |
| 66011-879 | Clear | 4 | 1 | 15-425 | 17 x 38 | 200 | — | 66022-569 |
| 66011-880 | Clear | 6 | 1.5 | 15-425 | 19 x 40 | 200 | — | — |
| Standard Vials without Caps | | | | | | | | |
| 66011-802 | Clear | 2 | .5 | 8-425 | 12 x 35 | 200 | 66011-303 | 66022-478 |
| 66011-904 | Amber | 2 | .5 | 8-425 | 12 x 35 | 200 | 66011-303 | 66022-478 |
| 66011-813 | Clear | 4 | 1 | 13-425 | 15 x 45 | 200 | 66011-325 | 66022-523 |
| 66011-915 | Amber | 4 | 1 | 13-425 | 15 x 45 | 200 | 66011-325 | 66022-523 |
| 66011-824 | Clear | 8 | 2 | 15-425 | 17 x 60 | 200 | 71000-066 | 66022-569 |
| 66011-926 | Amber | 8 | 2 | 15-425 | 17 x 60 | 200 | 71000-066 | 66022-569 |
| 66011-835 | Clear | 12 | 3 | 15-425 | 19 x 65 | 200 | — | — |
| 66011-846 | Clear | 16 | 4 | 18-400 | 21 x 70 | 200 | — | — |
| 66014-403 | Clear | 20 | 5 | 24-400 | 28 x 57 | 200 | 71000-068 | 66022-525 |
| 80076-576 | Amber | 20 | 5 | 24-400 | 28 x 57 | 200 | 71000-068 | 66022-525 |
| 66011-857 | Clear | 24 | 6 | 20-400 | 23 x 85 | 200 | — | 66022-556 |
| 66014-436 | Clear | 25 | 6.76 | 24-400 | 28 x 70 | 200 | — | 66022-525 |
| 89500-052 | Clear | 30 | 8 | 22-400 | 25 x 95 | 200 | — | — |
| 66014-469 | Clear | 40 | 10.8 | 24-400 | 28 x 95 | 200 | — | 66022-525 |
| 66014-500 | Amber | 40 | 10.8 | 24-400 | 28 x 95 | 200 | — | 66022-525 |

Sample Vials in Vial File®



66011-653



66011-675



80076-600

- Sample Vials in Vial File provides a compact, easily accessible means of sample storage
- Polystyrene case with partitions, foam inserts and alphanumeric indexing card organize and protect vials
- Clear vials are manufactured from low extractable borosilicate glass that conforms to USP Type I and ASTM E 438 Type I, Class A requirements
- Amber vials made from borosilicate glass that conforms to USP Type I requirements for light transmission to protect light-sensitive products
- Choice of solid or open top black phenolic screw cap
- Open top screw cap provides for sample retrieval with a syringe
- Caps attached to vials
- Vials and caps are autoclavable

| Cat. No. | Color | Size (mL) | Size (dr) | Graduations | Cap Style | Cap Material | Liner Material | Cap Size | Dia. x H (mm) | Vials/File | Qty / Case |
|-----------|-------|-----------|-----------|-------------|-----------|----------------|-------------------|----------|---------------|------------|------------|
| 66014-506 | Clear | 1.5 | .375 | No | Open Top | Black Phenolic | PTFE / Silicone | 8-425 | 12 x 35 | 60 | 1 |
| 80076-620 | Amber | 1.5 | .375 | No | Open Top | Black Phenolic | PTFE / Silicone | 8-425 | 12 x 35 | 60 | 1 |
| 66011-653 | Clear | 2 | .5 | No | Solid Top | Black Phenolic | 14B Rubber | 8-425 | 12 x 38 | 60 | 1 |
| 80076-608 | Clear | 2 | .5 | No | Solid Top | Black Phenolic | PTFE / 14B Rubber | 8-425 | 12 x 38 | 60 | 1 |
| 80076-600 | Amber | 2 | .5 | No | Solid Top | Black Phenolic | 14B Rubber | 8-425 | 12 x 38 | 60 | 1 |
| 80076-612 | Amber | 2 | .5 | No | Solid Top | Black Phenolic | PTFE / 14B Rubber | 8-425 | 12 x 38 | 60 | 1 |
| 66011-675 | Clear | 4 | 1 | No | Solid Top | Black Phenolic | 14B Rubber | 13-425 | 15 x 48 | 40 | 1 |
| 80076-610 | Clear | 4 | 1 | No | Solid Top | Black Phenolic | PTFE / 14B Rubber | 13-425 | 15 x 48 | 40 | 1 |
| 66011-755 | Clear | 4 | 1 | No | Open Top | Black Phenolic | PTFE / Silicone | 13-425 | 15 x 48 | 40 | 1 |
| 80076-602 | Amber | 4 | 1 | No | Solid Top | Black Phenolic | 14B Rubber | 13-425 | 15 x 48 | 40 | 1 |
| 80076-614 | Amber | 4 | 1 | No | Solid Top | Black Phenolic | PTFE / 14B Rubber | 13-425 | 15 x 48 | 40 | 1 |
| 80076-622 | Amber | 4 | 1 | No | Open Top | Black Phenolic | PTFE / Silicone | 13-425 | 15 x 48 | 40 | 1 |

E-C Sample Vials



- E-Conomically priced by packaging vials and screw caps separately
- Clear vials made from low extractable borosilicate glass that provides superior chemical resistance
- Clear vials conform to USP Type I and ASTM E 438 Type I, Class A requirements
- Amber vials made from borosilicate glass that conforms to USP Type I requirements for light transmission to protect light-sensitive products
- Vials packed in two shrink-wrapped packs of 100 vials which reduces contamination from corrugate
- 14B rubber lined black phenolic screw cap for aqueous samples
- PTFE-faced 14B rubber lined black phenolic screw cap for organic samples
- Caps and replacement caps can be purchased separately
- Vials and caps are autoclavable

| Cat. No. | Color | Size (mL) | Size (dr) | Cap Material | Liner Material | Cap Size | Dia. x H (mm) | Qty / Case | Fits M-T File® | Fits Vial Rack |
|------------|-------|-----------|-----------|----------------|-------------------|----------|---------------|------------|----------------|----------------|
| 66011-500 | Clear | 1.8 | .375 | — | — | 8-425 | 12 x 32 | 200 | 66011-303 | 66022-478 |
| 66011-514 | Amber | 1.8 | .375 | — | — | 8-425 | 12 x 32 | 200 | 66011-303 | 66022-478 |
| 66011-522 | Clear | 1.8 | .375 | Black Phenolic | 14B Rubber | 8-425 | 12 x 35** | 200 | 66011-303 | 66022-478 |
| 66011-544 | Clear | 1.8 | .375 | Black Phenolic | PTFE / 14B Rubber | 8-425 | 12 x 35** | 200 | 66011-303 | 66022-478 |
| 66011-536 | Amber | 1.8 | .375 | Black Phenolic | 14B Rubber | 8-425 | 12 x 35** | 200 | 66011-303 | 66022-478 |
| 66011-558 | Amber | 1.8 | .375 | Black Phenolic | PTFE / 14B Rubber | 8-425 | 12 x 35** | 200 | 66011-303 | 66022-478 |
| 66011-502 | Clear | 2 | .5 | — | — | 8-425 | 12 x 35 | 200 | 66011-303 | 66022-478 |
| 66011-516 | Amber | 2 | .5 | — | — | 8-425 | 12 x 35 | 200 | 66011-303 | 66022-478 |
| 66011-524 | Clear | 2 | .5 | Black Phenolic | 14B Rubber | 8-425 | 12 x 38** | 200 | 66011-303 | 66022-478 |
| 66011-546 | Clear | 2 | .5 | Black Phenolic | PTFE / 14B Rubber | 8-425 | 12 x 38** | 200 | 66011-303 | 66022-478 |
| 66011-538 | Amber | 2 | .5 | Black Phenolic | 14B Rubber | 8-425 | 12 x 38** | 200 | 66011-303 | 66022-478 |
| 66011-560 | Amber | 2 | .5 | Black Phenolic | PTFE / 14B Rubber | 8-425 | 12 x 38** | 200 | 66011-303 | 66022-478 |
| 66011-504 | Clear | 4 | 1 | — | — | 13-425 | 15 x 45 | 200 | 66011-325 | 66022-523 |
| 66011-518 | Amber | 4 | 1 | — | — | 13-425 | 15 x 45 | 200 | 66011-325 | 66022-523 |
| 66011-526 | Clear | 4 | 1 | Black Phenolic | 14B Rubber | 13-425 | 15 x 48** | 200 | 66011-325 | 66022-523 |
| 66011-548 | Clear | 4 | 1 | Black Phenolic | PTFE / 14B Rubber | 13-425 | 15 x 48** | 200 | 66011-325 | 66022-523 |
| 66011-540 | Amber | 4 | 1 | Black Phenolic | 14B Rubber | 13-425 | 15 x 48** | 200 | 66011-325 | 66022-523 |
| 66011-562 | Amber | 4 | 1 | Black Phenolic | PTFE / 14B Rubber | 13-425 | 15 x 48** | 200 | 66011-325 | 66022-523 |
| 66011-506 | Clear | 8 | 2 | — | — | 15-425 | 17 x 60 | 200 | 71000-066 | 66022-569 |
| 66011-520 | Amber | 8 | 2 | — | — | 15-425 | 17 x 60 | 200 | 71000-066 | 66022-569 |
| 66011-528 | Clear | 8 | 2 | Black Phenolic | 14B Rubber | 15-425 | 17 x 63** | 200 | 71000-066 | 66022-569 |
| 66011-528 | Clear | 8 | 2 | Black Phenolic | PTFE / 14B Rubber | 15-425 | 17 x 63** | 200 | 71000-066 | 66022-569 |
| 66011-542 | Amber | 8 | 2 | Black Phenolic | 14B Rubber | 15-425 | 17 x 63** | 200 | 71000-066 | 66022-569 |
| 66011-564 | Amber | 8 | 2 | Black Phenolic | PTFE / 14B Rubber | 15-425 | 17 x 63** | 200 | 71000-066 | 66022-569 |
| 66011-508 | Clear | 12 | 3 | — | — | 15-425 | 19 x 65 | 200 | — | — |
| 66011-530 | Clear | 12 | 3 | Black Phenolic | 14B Rubber | 15-425 | 19 x 68** | 200 | — | — |
| 66011-552 | Clear | 12 | 3 | Black Phenolic | PTFE / 14B Rubber | 15-425 | 19 x 68** | 200 | — | — |
| 66011-510 | Clear | 16 | 4 | — | — | 18-400 | 21 x 70 | 200 | — | — |
| 66011-532 | Clear | 16 | 4 | Black Phenolic | 14B Rubber | 18-400 | 21 x 73** | 200 | — | — |
| 66011-554 | Clear | 16 | 4 | Black Phenolic | PTFE / 14B Rubber | 18-400 | 21 x 73** | 200 | — | — |
| 66011-512 | Clear | 24 | 6 | — | — | 20-400 | 23 x 85 | 200 | — | 66022-556 |
| 66011-534 | Clear | 24 | 6 | Black Phenolic | 14B Rubber | 20-400 | 23 x 88** | 200 | — | 66022-556 |
| 66011-556 | Clear | 24 | 6 | Black Phenolic | PTFE / 14B Rubber | 20-400 | 23 x 88** | 200 | — | 66022-556 |
| 80076-562 | Clear | 40 | 10.8 | — | — | 24-400 | 28 x 95 | 200 | — | 66022-525 |
| 83009-706* | Clear | 60 | 15 | — | — | 24-400 | 30 x 125 | 143 | — | 14007-178 |

* Includes one shrink-wrapped pack of 143 vials ** Measurement with cap attached

Screw Caps for Sample Vials



Black Phenolic



White Polypropylene Solid Top



White Polypropylene Open Top

- Choice of black phenolic, white polypropylene or urea screw caps
- PTFE faced (14B) styrene-butadiene rubber liner provides a totally inert inner seal and surface facing the sample or product
- Bonded PTFE faced silicone liner ideal for storage of volatile solvents, sensitive compounds and corrosive chemicals
- Open top screw caps have a bonded PTFE faced silicone liner that provides access with a syringe
- Pre-slit PTFE / Silicone liner easily pierced by liquid handling needles
- Can withstand autoclaving / sterilization

| Cat. No. | Cap Size | Cap Style | Cap Material | Color | Cap Liner | Autoclavable | Qty / Case |
|-----------|----------|------------|---------------|-------|---------------------------------|--------------|------------|
| 66011-960 | 8-425 | Solid Top | Phenolic | Black | 14B Rubber | Yes | 1000 |
| 14007-174 | 8-425 | Solid Top | Phenolic | Black | PTFE / 14B Rubber | Yes | 200 |
| 66011-970 | 13-425 | Solid Top | Phenolic | Black | 14B Rubber | Yes | 200 |
| 66012-350 | 13-425 | Solid Top | Phenolic | Black | PTFE / 14B Rubber | Yes | 200 |
| 16153-249 | 13-425 | Solid Top | Phenolic | Black | PE Cone | No | 144 |
| 16153-201 | 13-425 | Solid Top | Polypropylene | White | Poly-Vinyl | No | 144 |
| 16153-273 | 13-425 | Solid Top | Polypropylene | White | Foamed PE | No | 144 |
| 16153-225 | 13-425 | Solid Top | Polypropylene | White | PTFE / Foamed PE | No | 144 |
| 89042-264 | 13-425 | Solid Top | Polypropylene | White | Bonded PTFE / Silicone | Yes | 250 |
| 80076-566 | 13-425 | Open Top | Polypropylene | Black | Bonded PTFE / Silicone | Yes | 250 |
| 10796-632 | 13-425 | Open Top | Polypropylene | Black | Pre-Slit Bonded PTFE / Silicone | Yes | 250 |
| 66011-981 | 15-425 | Solid Top | Phenolic | Black | 14B Rubber | Yes | 200 |
| 66012-372 | 15-425 | Solid Top | Phenolic | Black | PTFE / 14B Rubber | Yes | 200 |
| 16153-250 | 15-425 | Solid Top | Phenolic | Black | PE Cone | No | 144 |
| 16153-202 | 15-425 | Solid Top | Polypropylene | White | Poly-Vinyl | No | 144 |
| 16153-274 | 15-425 | Solid Top | Polypropylene | White | Foamed PE | No | 144 |
| 16153-224 | 15-425 | Solid Top | Polypropylene | White | PTFE / Foamed PE | No | 144 |
| 89042-268 | 15-425 | Solid Top | Polypropylene | White | Bonded PTFE / Silicone | Yes | 250 |
| 89042-284 | 15-425 | Open Top | Polypropylene | White | Bonded PTFE / Silicone | Yes | 250 |
| 10796-636 | 15-425 | Open Top | Polypropylene | Black | Pre-Slit Bonded PTFE / Silicone | Yes | 250 |
| 66021-748 | 15-425 | Closed Top | Urea | White | Metal Foil | No | 1000 |
| 66012-011 | 18-400 | Solid Top | Phenolic | Black | 14B Rubber | Yes | 500 |
| 66012-394 | 18-400 | Solid Top | Phenolic | Black | PTFE / 14B Rubber | Yes | 200 |
| 16153-251 | 18-400 | Solid Top | Phenolic | Black | PE Cone | No | 144 |
| 16153-203 | 18-400 | Solid Top | Polypropylene | White | Poly-Vinyl | No | 144 |
| 16153-275 | 18-400 | Solid Top | Polypropylene | White | Foamed PE | No | 144 |
| 16153-227 | 18-400 | Solid Top | Polypropylene | White | PTFE / Foamed PE | No | 144 |
| 80076-400 | 20-400 | Solid Top | Phenolic | Black | 14B Rubber | Yes | 144 |
| 66012-419 | 20-400 | Solid Top | Phenolic | Black | PTFE / 14B Rubber | Yes | 100 |
| 10796-536 | 20-400 | Solid Top | Phenolic | Black | PE Cone | No | 144 |
| 10796-434 | 20-400 | Solid Top | Polypropylene | White | PTFE / Foamed PE | No | 144 |
| 80076-404 | 24-400 | Solid Top | Phenolic | Black | 14B Rubber | Yes | 144 |
| 66012-430 | 24-400 | Solid Top | Phenolic | Black | PTFE / 14B Rubber | Yes | 100 |
| 80076-568 | 24-400 | Solid Top | Phenolic | Black | PTFE / 14B Rubber | Yes | 200 |
| 30620-986 | 24-400 | Solid Top | Phenolic | Black | PE Cone | No | 144 |
| 10796-432 | 24-400 | Solid Top | Polypropylene | White | Poly-Vinyl | No | 144 |
| 16153-281 | 24-400 | Solid Top | Polypropylene | White | Foamed PE | No | 144 |
| 10796-436 | 24-400 | Solid Top | Polypropylene | White | PTFE / Foamed PE | No | 144 |
| 89042-276 | 24-400 | Solid Top | Polypropylene | White | Bonded PTFE / Silicone | Yes | 100 |
| 89042-292 | 24-400 | Open Top | Polypropylene | White | Bonded PTFE / Silicone | Yes | 100 |
| 66021-760 | 24-400 | Solid Top | Urea | White | Metal Foil | No | 1000 |

Serum Tubing Vials



- 2 - 20mL size
- Clear vials manufactured from low extractable borosilicate glass that conforms to USP Type I and ASTM E 438 Type I, Class A requirements
- Amber glass conforms to USP Type I requirements to protect light-sensitive samples
- Tubular design provides excellent clarity and dimensional consistency from vial to vial
- Specially designed bottom radius adds strength for lyophilization applications
- Lighter weight compared to molded bottles
- Shrink-wrapped modules reduce particulate contamination
- Autoclavable

| Cat. No. | Size (mL) | Mouth ID x OD (mm) | Dia. x H | Qty / Case | Fits Rack |
|--------------------------|-----------|--------------------|-----------|------------|-----------|
| Clear Serum Vials | | | | | |
| 16171-284 | 2 | 7 x 13 | 15 x 32 | 144 | 66022-523 |
| 16171-285 | 3 | 7 x 13 | 17 x 38 | 144 | 66022-569 |
| 16171-286 | 5 | 13 x 20 | 22 x 40 | 144 | 66022-556 |
| 16171-287 | 10 | 13 x 20 | 24 x 50 | 144 | — |
| 16171-288 | 20 | 13 x 20 | 30.5 x 58 | 120 | — |
| Amber Serum Vials | | | | | |
| 16171-293 | 2 | 7 x 13 | 15 x 32 | 144 | 66022-523 |
| 16171-298 | 5 | 13 x 20 | 22 x 40 | 144 | 66022-556 |
| 16171-291 | 10 | 13 x 20 | 24 x 50 | 144 | — |

Note: When selecting a rubber stopper or aluminum seal, match the mouth OD dimension of the vial.

Serum Bottle

- Ideal for long and short term sample storage, lyophilization and vaccine / injectable drug containers
- Fits most lyophilization applications
- Borosilicate glass conforms to USP Type I requirements
- Clear bottles manufactured from WHEATON 400 borosilicate molded glass that conforms to USP Type I requirements
- Amber bottles manufactured from WHEATON 500 borosilicate glass that conforms to USP Type I requirements
- Shrink-wrapped partitioned modules reduce breakage

| Cat. No. | Color | Size (mL) | Mouth ID x OD (mm) | Dia. x H (mm) | Fits Rack | Qty / Case |
|-----------|-------|-----------|--------------------|---------------|-----------|------------|
| 89422-806 | Clear | 2 | 7 x 13 | 15.6 x 36 | 66022-569 | 288 |
| 16171-308 | Clear | 5 | 13 x 20 | 23 x 47 | 66022-556 | 288 |
| 16171-401 | Amber | 5 | 13 x 20 | 23 x 47 | 66022-556 | 288 |
| 16171-319 | Clear | 10 | 13 x 20 | 25 x 54 | 66022-525 | 288 |
| 16171-433 | Amber | 10 | 13 x 20 | 25 x 54 | 66022-525 | 288 |
| 16171-320 | Clear | 20 | 13 x 20 | 32 x 58 | — | 288 |
| 16171-466 | Amber | 20 | 13 x 20 | 32 x 58 | — | 288 |
| 16171-330 | Clear | 30 | 13 x 20 | 37 x 63 | — | 288 |
| 16171-499 | Amber | 30 | 13 x 20 | 37 x 63 | — | 288 |
| 16171-341 | Clear | 50 | 13 x 20 | 43 x 73 | — | 288 |
| 16171-524 | Amber | 50 | 13 x 20 | 43 x 73 | — | 288 |
| 16171-374 | Clear | 60 | 13 x 20 | 41 x 91 | — | 144 |
| 16171-352 | Clear | 100 | 13 x 20 | 52 x 95 | — | 144 |
| 16171-557 | Amber | 100 | 13 x 20 | 52 x 95 | — | 144 |
| 16171-385 | Clear | 125 | 13 x 20 | 54 x 107 | — | 144 |

*Note: Select aluminum seal and stopper size by using the mouth OD dimension of the bottle or vial

Serum Bottle, PVC Dropper Tip

- Create a dropper container using a crimp / serum bottle with 20mm mouth OD
- Dropper tip is made from PVC with HDPE closure
- Dispenses 40µL drop using water



| Part. No. | Description | Dia. x H (mm) | Qty / Case |
|-----------|-----------------|---------------|------------|
| 16300-061 | PVC Dropper Tip | 23 x 44 | 100 |

Vacule® Vial

- Heavy wall construction designed for lyophilization and freeze-drying applications
- Screw threads eliminate use of crimp seal
- Manufactured from WHEATON 33 low extractable clear borosilicate glass that conforms to USP Type I and ASTM E 438 Type I, Class A requirements
- Vacule vials have controlled ID, for accurate stopper fit
- Choice of solid or open top screw cap
- Stoppers and accessories listed below
- 26675-909 and 26675-920 are supplied with unlined black phenolic cap



| Cat. No. | Size (mL) | Dia. x H (mm) | Cap Finish Size | Fits Rack | Qty / Case |
|---------------------|-----------|---------------|-----------------|-----------|------------|
| Vacule® Vial | | | | | |
| 16300-200* | 4 | 17 x 45 | 15-425 | 66022-569 | 200 |
| 26675-909 | 5 | 22 x 40 | 22-350 | 66022-556 | 200 |
| 26675-920 | 10 | 22 x 55 | 22-350 | 66022-556 | 200 |

| Cat. No. | Description | Qty/Pack | Qty / Case |
|-------------------------------------------------------|---------------------------------------------------|----------|------------|
| Screw Caps and Stoppers for Cat. No. 12-009-42 | | | |
| 16171-672 | Red Rubber Stopper | 100 | 1000 |
| 71000-060 | Lyophilization Stopper, 2-Leg | 100 | 1000 |
| 66011-981 | Cap, Solid Top, Rubber Liner, 15-425 Screw Thread | 200 | 200 |
| 66011-981 | Cap, Open Top, without Liner, 15-425 Screw Thread | 200 | 200 |

| Cat. No. | Description | Qty/Pack | Qty / Case |
|---------------------------------------------------------------------|----------------------------------------------------|----------|------------|
| Screw Caps and Stoppers for Cat. No. 12-009-40 and 12-009-41 | | | |
| 16171-680 | Red Rubber Stoppers | 100 | 1000 |
| 89079-400 | Lyophilization Stopper, 2-Leg | 100 | 1000 |
| 89107-780 | Lyophilization Stopper, 3-Leg | 100 | 1000 |
| 26675-942 | Cap, Solid Top, without Liner, 22-350 Screw Thread | 500 | 500 |

*Purchase closures separately



Aluminum Seals (Unlined)



- Wide range of styles and sizes
- Color selection includes natural, red, blue and green
- Open top seals expose stopper for sample retrieval with a syringe
- Tear-off seal removes completely allowing content to pour from bottle
- Solid top seals are excellent for long-term storage of samples
- Flip cap seals provide tamper evidence

| Cat. No. | For Mouth OD (mm) | Style | Color | Qty / Case |
|-----------|-------------------|-----------|---------|------------|
| 10796-538 | 11 | Open Top | Natural | 1000 |
| 16171-786 | 11 | Open Top | Blue | 1000 |
| 16171-787 | 11 | Open Top | Red | 1000 |
| 16171-788 | 11 | Open Top | Green | 1000 |
| 10796-174 | 11 | Solid-Top | Natural | 1000 |

| | | | | |
|-----------|----|----------------------|---------|------|
| 16171-789 | 13 | Open Top | Natural | 1000 |
| 10796-540 | 13 | Open Top | Blue | 1000 |
| 10796-542 | 13 | Open Top | Red | 1000 |
| 16171-818 | 13 | Center Disc Tear-Out | Natural | 1000 |
| 16171-819 | 13 | Center Disc Tear-Out | Blue | 1000 |
| 16171-842 | 13 | Center Disc Tear-Out | Red | 1000 |
| 16171-821 | 13 | Center Disc Tear-Out | Green | 1000 |
| 16171-840 | 13 | Complete Tear-Off | Natural | 1000 |
| 16171-841 | 13 | Complete Tear-Off | Blue | 1000 |
| 16171-842 | 13 | Complete Tear-Off | Red | 1000 |
| 16171-843 | 13 | Complete Tear-Off | Green | 1000 |
| 16171-942 | 13 | Flip Cap | Red | 1000 |
| 10796-630 | 13 | Flip Cap Tear-Off | Red | 1000 |

| | | | | |
|-----------|----|----------------------|---------|------|
| 16171-793 | 20 | Open Top | Natural | 1000 |
| 10796-544 | 20 | Open Top | Blue | 1000 |
| 16171-796 | 20 | Open Top | Green | 1000 |
| 16171-829 | 20 | Center Disc Tear-Out | Natural | 1000 |
| 16171-826 | 20 | Center Disc Tear-Out | Blue | 1000 |
| 16171-827 | 20 | Center Disc Tear-Out | Red | 1000 |
| 16171-828 | 20 | Center Disc Tear-Out | Green | 1000 |
| 89047-008 | 20 | Solid-Top | Natural | 1000 |
| 16171-851 | 20 | Complete Tear-Off | Natural | 1000 |
| 16171-852 | 20 | Complete Tear-Off | Blue | 1000 |
| 10796-546 | 20 | Complete Tear-Off | Red | 1000 |
| 16171-854 | 20 | Complete Tear-Off | Green | 1000 |
| 16171-944 | 20 | Flip Cap | Red | 1000 |
| 10796-628 | 20 | Flip Cap | White | 1000 |
| 16171-948 | 20 | Flip Cap Tear-Off | Red | 1000 |

| | | | | |
|-----------|----|----------------------|---------|------|
| 16171-830 | 30 | Center Disc Tear-Out | Natural | 1000 |
| 16171-862 | 30 | Complete Tear-Off | Natural | 1000 |

Ultra Pure Stoppers



- Manufactured from an ultra pure bromobutyl formulation with extremely high chemical purity and low gas permeability
- Free of latex, nitrosamines and 2-MCBT (2-mercaptobenzothiazole)
- Compatible with applications such as Water for Injection (WFI) where rubber extractables can cause problems
- Complies with US, European and Japanese Pharmacopeias

Straight Plug Stoppers

- Low particulate content and low level of extractables
- Very well suited for ready-for-sterilization and ready-for-use applications
- Autoclavable

| Cat. No. | For Mouth ID x OD (mm) | Material Stopper | Durometer | Qty / Case |
|-----------|------------------------|------------------|-----------|------------|
| 10796-552 | 7 x 13 | Gray Bromobutyl | 47 | 1000 |
| 10796-556 | 13 x 20 | Gray Bromobutyl | 47 | 1000 |

Lyophilization Stoppers

- Available in 2-Leg, 3-Leg and Igloo styles
- Demonstrates a very low level of moisture adsorption
- Very low adsorption of the preservatives present in aqueous parenteral solutions
- Autoclavable

| Cat. No. | For Mouth ID x OD (mm) | Material Stopper | Durometer | Qty / Case |
|-----------------------------|------------------------|------------------|-----------|------------|
| 2-Leg Lyophilization | | | | |
| 89426-904 | 13 x 20 | Gray Bromobutyl | 46 | 1000 |
| 3-Leg Lyophilization | | | | |
| 10796-558 | 13 x 20 | Gray Bromobutyl | 46 | 1000 |
| Igloo Lyophilization | | | | |
| 10796-554 | 7 x 13 | Gray Bromobutyl | 46 | 1000 |
| 10796-560 | 13 x 20 | Gray Bromobutyl | 46 | 1000 |

Complete Coat Stoppers

- Stoppers are completely coated with a fluorinated polymer
- Manufactured in a silicone-free environment
- PTFE like coatings prevents reactions due to sample contact with rubber
- Autoclavable

| Cat. No. | For Mouth ID x OD (mm) | Material Stopper | Durometer | Qty / Case |
|------------------------------|------------------------|------------------|-----------|------------|
| Straight Plug Stopper | | | | |
| 89236-132 | 7 x 13 | Gray Bromobutyl | 39 | 1000 |
| 89236-134 | 13 x 20 | Gray Bromobutyl | 39 | 1000 |

Rubber Stoppers



- Variety of styles, sizes and rubber formulations
- Manufactured from the highest quality raw materials
- Components manufactured to yield exceptional dimensional stability
- Straight plug stoppers provide maximum sealing for vials with straight-wall glass finish
- Snap-on style provides maximum sealing for vials with a blow-back glass finish
- Sleeve style stoppers feature a fold-over skirt for sealing in serum finish vials without a crimp closure
- Autoclavable

| Cat. No. | For Mouth ID x OD (mm) | Style | Stopper Material | *Durometer | Shelf Pack | Qty / Case |
|-----------|------------------------|------------------------------------|---------------------------------------------|------------|------------|------------|
| 89047-004 | 5 x 11 | Sleeve | Natural Red Rubber | 40 | 100 | 1000 |
| 16171-669 | 7 x 13 | Straight Plug | Natural Red Rubber | 40 | 100 | 1000 |
| 16171-670 | 7 x 13 | Straight Plug | Gray Chlorobutyl-Isoprene Blend / FEP Faced | 40 | 100 | 1000 |
| 71000-060 | 7 x 13 | 2-Leg Lyophilization | Gray Chlorobutyl | 50 | 100 | 1000 |
| 80093-832 | 7 x 13 | Sleeve | Natural Red Rubber | 40 | 100 | 1000 |
| 16171-672 | 7 x 13 | Snap-On | Natural Red Rubber | 40 | 100 | 1000 |
| 16171-674 | 7 x 13 | Snap-On | Gray Chlorobutyl | 55 | 100 | 1000 |
| 16171-681 | 10 x 20 | Straight Plug | Natural Red Rubber | 40 | 100 | 1000 |
| 89047-006 | 10 x 20 | Sleeve | Natural Red Rubber | 40 | 100 | 1000 |
| 16171-682 | 13 x 20 | Straight Plug | Natural Pink Rubber | 48 | 100 | 1000 |
| 16171-680 | 13 x 20 | Straight Plug | Natural Red Rubber | 45 | 100 | 1000 |
| 89168-268 | 13 x 20 | Straight Plug | Gray Chlorobutyl | 46 | 100 | 1000 |
| 10028-042 | 13 x 20 | Straight Plug | Gray Chlorobutyl-Isoprene Blend | 40 | 100 | 1000 |
| 16171-651 | 13 x 20 | Straight Plug | Gray Chlorobutyl-Isoprene Blend / FEP Faced | 40 | — | 1000 |
| 16171-655 | 13 x 20 | Straight Plug | Black FKM | 55 | — | 100 |
| 16171-656 | 13 x 20 | Straight Plug | Silicone | 55 | 100 | 1000 |
| 10796-548 | 13 x 20 | Snap-On – Thin Flange | Gray Chlorobutyl | 50 | 100 | 1000 |
| 16171-727 | 13 x 20 | 2-Leg Lyophilization | Gray Chlorobutyl-Isoprene Blend | 50 | 100 | 1000 |
| 89079-400 | 13 x 20 | 2-Leg Lyophilization | Gray Chlorobutyl | 46 | 100 | 1000 |
| 89107-780 | 13 x 20 | 3-Leg Lyophilization | Gray Chlorobutyl | 46 | 100 | 1000 |
| 15507-144 | 13 x 20 | 3-Leg Lyophilization – Thin Flange | Gray Chlorobutyl | 55 | — | 300 |
| 80093-834 | 13 x 20 | Sleeve | Natural Red Rubber | 40 | 100 | 1000 |
| 16171-660 | 13 x 20 | Snap-On | Natural Red Rubber | 45 | 100 | 1000 |
| 89107-782 | 13 x 20 | Snap-On | Gray Chlorobutyl | 46 | 100 | 1000 |
| 16171-691 | 15 x 30 | Straight Plug | Natural Red Rubber | 40 | 100 | 1000 |
| 16171-630 | 15 x 30 | Straight Plug | Gray Bromobutyl | 50 | 100 | 1000 |
| 16170-462 | 15 x 30 | Sleeve | Natural Red Rubber | 40 | 100 | 1000 |
| 10796-550 | 15 x 30 | Snap-On | Gray Bromobutyl | 50 | 100 | 1000 |
| 89427-454 | 20 x 28 | 2-Leg Lyophilization | Gray Chlorobutyl | 46 | 100 | 1000 |

*Durometer is a measure of the resistance of a material to indentation. The higher the number, the greater the resistance. The Shore A scale is used for soft elastomers. The term durometer is often used to refer to the measurement, as well as the instrument itself.

High Recovery Vials

NextGen™ V Vials®



WHEATON NextGen™ V Vials® are ideal for small scale reactions, centrifugation, storage, packaging and shipping of vital samples. The conical interior provides downward drainage for maximum sample retrieval. Low particulate packaging protects against contamination during transportation and storage. Clear vials conform to USP Type I and ASTM E 438 Type I, Class A requirements. Amber vials are made from amber borosilicate glass that conforms to USP Type I requirements for light transmission to protect light-sensitive products. Vials are available graduated or non-graduated, as well as with the option for screw thread or crimp / serum finish. Closures for either finish can be purchased separately.

The steep conical V interior bottom provides exceptional downward drainage while allowing maximum retrieval of contents by syringe. V Vials are perfect for specialty pharma, biotech, pharmaceutical and diagnostics packaging applications.

NextGen V Vials are manufactured from heavy wall, low extractable, borosilicate glass providing excellent chemical resistance and durability during packaging and transportation.

NextGen™ V Vials®



- Conical interior provides downward drainage for maximum sample retrieval
- Ideal for small-scale reactions, centrifugation, storage, packaging and shipping
- Low particulate packaging protects against contamination during transportation and storage
- Clear vials conform to USP Type I and ASTM E 438 Type I, Class A requirements
- Amber vials made from amber borosilicate glass that conforms to USP Type I requirements for light transmission to protect light-sensitive products
- Graduated or non-graduated
- Choose screw thread or crimp / serum finish
- Closures for crimp / serum finish vials can be purchased separately

Spin Vanes

- Magnetic stir bar for use with NextGen™ V Vials®
- Made from PTFE
- Place stir bar in vial and use with magnetic stirrer



| Cat. No. | Description | Qty / Case |
|-----------|-------------------------------|------------|
| 62402-556 | Fits 0.3 and 1.0mL V Vials | 6 |
| 62402-558 | Fits 2, 3, 5 and 10mL V Vials | 6 |

| Cat. No. | Color | Size (mL) | Graduated | Cap Style | Cap Material | Cap Color | Liner Material | Cap Size | Dia. x H (mm) | Qty / Case |
|------------|-------|-----------|-----------|----------------------------------------|--------------|-----------|-------------------|----------|---------------|------------|
| 89085-442 | Clear | 0.1 | No | Open Top, Screw Cap | Phenolic | Black | PTFE / Silicone | 8-425 | 12 x 35 | 12 |
| 66021-056* | Clear | 0.1 | No | Crimp Top, purchase closure separately | — | — | — | 11mm | 12 x 32 | 12 |
| 89085-430 | Clear | 0.3 | Yes | Solid Top, Screw Cap | Phenolic | Black | PTFE / 14B Rubber | 13-425 | 13 x 35 | 12 |
| 89085-416 | Clear | 0.3 | No | Solid Top, Screw Cap | Phenolic | Black | PTFE / 14B Rubber | 13-425 | 13 x 35 | 12 |
| 89085-444 | Clear | 0.3 | No | Open Top, Screw Cap | Phenolic | Black | PTFE / Silicone | 8-425 | 12 x 35 | 12 |
| 89085-446 | Clear | 0.3 | No | Open Top, Screw Cap | Phenolic | Black | PTFE / Silicone | 13-425 | 13 x 35 | 12 |
| 89085-458 | Clear | 0.3 | Yes | Open Top, Screw Cap | Phenolic | Black | PTFE / Silicone | 13-425 | 13 x 35 | 12 |
| 89085-468 | Amber | 0.3 | No | Solid Top, Screw Cap | Phenolic | Black | PTFE / 14B Rubber | 13-425 | 13 x 35 | 12 |
| 89085-478 | Amber | 0.3 | No | Open Top, Screw Cap | Phenolic | Black | PTFE / Silicone | 13-425 | 13 x 35 | 12 |
| 89085-488* | Amber | 0.3 | No | Screw Cap, purchase closure separately | — | — | — | 13-425 | 13 x 32 | 12 |
| 89085-404* | Clear | 0.3 | No | Crimp Top, purchase closure separately | — | — | — | 11mm | 12 x 32 | 12 |
| 89085-406* | Clear | 0.3 | No | Crimp Top, purchase closure separately | — | — | — | 13mm | 13 x 32 | 12 |
| 89085-432 | Clear | 1.0 | Yes | Solid Top, Screw Cap | Phenolic | Black | PTFE / 14B Rubber | 13-425 | 13 x 44 | 12 |
| 89085-418 | Clear | 1.0 | No | Solid Top, Screw Cap | Phenolic | Black | PTFE / 14B Rubber | 13-425 | 13 x 44 | 12 |
| 89085-448 | Clear | 1.0 | No | Open Top, Screw Cap | Phenolic | Black | PTFE / Silicone | 13-425 | 13 x 44 | 12 |
| 89085-460 | Clear | 1.0 | Yes | Open Top, Screw Cap | Phenolic | Black | PTFE / Silicone | 13-425 | 13 x 44 | 12 |
| 89085-470 | Amber | 1.0 | No | Solid Top, Screw Cap | Phenolic | Black | PTFE / 14B Rubber | 13-425 | 13 x 44 | 12 |
| 89085-480 | Amber | 1.0 | No | Open Top, Screw Cap | Phenolic | Black | PTFE / Silicone | 13-425 | 13 x 44 | 12 |
| 89085-490* | Amber | 1.0 | No | Screw Cap, purchase closure separately | — | — | — | 13-425 | 13 x 41 | 12 |
| 89085-408* | Clear | 1.0 | No | Crimp Top, purchase closure separately | — | — | — | 13mm | 13 x 41 | 12 |
| 89085-434 | Clear | 2.0 | Yes | Solid Top, Screw Cap | Phenolic | Black | PTFE / 14B Rubber | 15-415 | 17 x 61 | 12 |
| 89085-436 | Clear | 2.0 | Yes | Solid Top, Screw Cap | Phenolic | Black | PTFE / 14B Rubber | 20-400 | 20 x 44 | 12 |
| 89085-420 | Clear | 2.0 | No | Solid Top, Screw Cap | Phenolic | Black | PTFE / 14B Rubber | 15-415 | 17 x 61 | 12 |
| 89085-422 | Clear | 2.0 | No | Solid Top, Screw Cap | Phenolic | Black | PTFE / 14B Rubber | 20-400 | 20 x 44 | 12 |
| 89085-450 | Clear | 2.0 | No | Open Top, Screw Cap | Phenolic | Black | PTFE / Silicone | 20-400 | 20 x 44 | 12 |
| 89085-462 | Clear | 2.0 | Yes | Open Top, Screw Cap | Phenolic | Black | PTFE / Silicone | 20-400 | 20 x 44 | 12 |
| 89085-472 | Amber | 2.0 | No | Solid Top, Screw Cap | Phenolic | Black | PTFE / 14B Rubber | 20-400 | 20 x 44 | 12 |
| 89085-482 | Amber | 2.0 | No | Open Top, Screw Cap | Phenolic | Black | PTFE / Silicone | 20-400 | 20 x 44 | 12 |
| 89085-492* | Amber | 2.0 | No | Screw Cap, purchase closure separately | — | — | — | 20-400 | 20 x 41 | 12 |
| 89085-410* | Clear | 2.0 | No | Crimp Top, purchase closure separately | — | — | — | 20mm | 20 x 40 | 12 |
| 89085-438 | Clear | 3.0 | Yes | Solid Top, Screw Cap | Phenolic | Black | PTFE / 14B Rubber | 20-400 | 20 x 50 | 12 |
| 89085-424 | Clear | 3.0 | No | Solid Top, Screw Cap | Phenolic | Black | PTFE / 14B Rubber | 20-400 | 20 x 50 | 12 |
| 89085-452 | Clear | 3.0 | No | Open Top, Screw Cap | Phenolic | Black | PTFE / Silicone | 20-400 | 20 x 50 | 12 |
| 89085-464 | Clear | 3.0 | Yes | Open Top, Screw Cap | Phenolic | Black | PTFE / Silicone | 20-400 | 20 x 50 | 12 |
| 89085-412* | Clear | 3.0 | No | Crimp Top, purchase closure separately | — | — | — | 20mm | 20 x 46 | 12 |
| 89085-440 | Clear | 5.0 | Yes | Solid Top, Screw Cap | Phenolic | Black | PTFE / 14B Rubber | 20-400 | 20 x 65 | 12 |
| 89085-426 | Clear | 5.0 | No | Solid Top, Screw Cap | Phenolic | Black | PTFE / 14B Rubber | 20-400 | 20 x 65 | 12 |
| 89085-454 | Clear | 5.0 | No | Open Top, Screw Cap | Phenolic | Black | PTFE / Silicone | 20-400 | 20 x 65 | 12 |
| 89085-466 | Clear | 5.0 | Yes | Open Top, Screw Cap | Phenolic | Black | PTFE / Silicone | 20-400 | 20 x 65 | 12 |
| 89085-476 | Amber | 5.0 | No | Solid Top, Screw Cap | Phenolic | Black | PTFE / 14B Rubber | 20-400 | 20 x 65 | 12 |
| 89085-486 | Amber | 5.0 | No | Open Top, Screw Cap | Phenolic | Black | PTFE / Silicone | 20-400 | 20 x 65 | 12 |
| 89085-496* | Amber | 5.0 | No | Screw Cap, purchase closure separately | — | — | — | 20-400 | 20 x 62 | 12 |
| 89085-414* | Clear | 5.0 | No | Crimp Top, purchase closure separately | — | — | — | 20mm | 20 x 61 | 12 |
| 89085-428 | Clear | 10.0 | No | Solid Top, Screw Cap | Phenolic | Black | PTFE / 14B Rubber | 24-400 | 25.4 x 72 | 6 |
| 89085-456 | Clear | 10.0 | No | Open Top, Screw Cap | Phenolic | Black | PTFE / Silicone | 24-400 | 25.4 x 72 | 6 |

* Purchase closures separately.

E-Z Ex-Traction® Vials



E-Z Ex-Traction Vials feature a revolutionary design that provides greater ease of handling, increased product recovery and improved storage capacity. A patented outer bottom configuration differentiates it from other vials enabling easy use with racks and automated equipment. The bottom well is manufactured to tight tolerances with a constant depth and shape, critical for automated systems that can be damaged by irregularities in vial dimensions. The interior walls transition smoothly into the conical well at the bottom preventing loss of product that would be trapped by irregularities. In addition, the high recovery conical bottom ensures the increased retrieval of valuable product.

E-Z Ex-Traction® Vials

- Conical well ensures maximum sample recovery
- Quality engineered for automated sample handling systems
- Excellent for chemical compound or biological sample storage
- Made from low extractable borosilicate glass that conforms to USP Type I and ASTM E 438 Type I, Class A requirements
- Vials can be easily bar coded using WHEATON customized services
- Screw caps can be purchased separately



| Cat. No. | Color | Size (mL) | Size (dr) | Dia. x H (mm) | Cap Size | Qty / Case |
|-----------|-------|-----------|-----------|---------------|----------|------------|
| 89042-296 | Clear | 2 | .5 | 15 x 32 | 13-425 | 250 |
| 89042-298 | Clear | 2 | .5 | 15 x 32 | 13-425 | 1000 |
| 80076-564 | Clear | 4 | 1 | 15 x 45 | 13-425 | 250 |
| 89042-300 | Clear | 4 | 1 | 15 x 45 | 13-425 | 1000 |
| 89042-302 | Clear | 8 | 2 | 16.75 x 60 | 15-425 | 250 |
| 89042-304 | Clear | 8 | 2 | 16.75 x 60 | 15-425 | 1000 |
| 89042-306 | Clear | 10 | 2.5 | 19 x 70 | 22-400 | 100 |
| 89042-308 | Clear | 10 | 2.5 | 19 x 70 | 22-400 | 500 |
| 89042-310 | Clear | 20 | 5 | 26.5 x 67 | 24-400 | 100 |
| 89042-312 | Clear | 20 | 5 | 26.5 x 67 | 24-400 | 500 |

E-Z Ex-Traction® Vial Screw Caps

- Choice of black phenolic or white polypropylene screw caps
- PTFE faced (14B) styrene-butadiene rubber liner provides an inert inner seal and surface facing the sample or product
- Bonded PTFE faced silicone liner ideal for storage of volatile solvents, sensitive compounds and corrosive chemicals
- Open top screw caps have a bonded PTFE faced silicone liner that provides access with a syringe
- Pre-slit PTFE silicone liner easily pierced by liquid handling needles
- Can withstand autoclaving / sterilization



**Black Phenolic
Solid Top Cap**



**White Polypropylene
Open Top Cap**

| Cat. No. | Cap Size | Cap Style | Cap Material | Color | Cap Liner | Qty / Pack | Qty / Case |
|-----------|----------|-----------|---------------|-------|---------------------------------|------------|------------|
| 89042-250 | 13-425 | Solid Top | Phenolic | Black | PTFE / 14B Rubber | 250 | 250 |
| 89042-252 | 13-425 | Solid Top | Phenolic | Black | PTFE / 14B Rubber | 250 | 1000 |
| 89042-264 | 13-425 | Solid Top | Polypropylene | White | Bonded PTFE / Silicone | 250 | 250 |
| 89042-266 | 13-425 | Solid Top | Polypropylene | White | Bonded PTFE / Silicone | 250 | 1000 |
| 80076-566 | 13-425 | Open Top | Polypropylene | Black | Bonded PTFE / Silicone | 250 | 250 |
| 89042-280 | 13-425 | Open Top | Polypropylene | White | Bonded PTFE / Silicone | 250 | 250 |
| 89042-282 | 13-425 | Open Top | Polypropylene | White | Bonded PTFE / Silicone | 250 | 1000 |
| 10796-632 | 13-425 | Open Top | Polypropylene | Black | Pre-Slit Bonded PTFE / Silicone | 250 | 250 |
| 10796-634 | 13-425 | Open Top | Polypropylene | Black | Pre-Slit Bonded PTFE / Silicone | 250 | 1000 |
| 89042-254 | 15-425 | Solid Top | Phenolic | Black | PTFE / 14B Rubber | 250 | 250 |
| 89042-256 | 15-425 | Solid Top | Phenolic | Black | PTFE / 14B Rubber | 250 | 1000 |
| 89042-268 | 15-425 | Solid Top | Polypropylene | White | Bonded PTFE / Silicone | 250 | 250 |
| 89042-270 | 15-425 | Solid Top | Polypropylene | White | Bonded PTFE / Silicone | 250 | 1000 |
| 89042-284 | 15-425 | Open Top | Polypropylene | White | Bonded PTFE / Silicone | 250 | 250 |
| 89042-286 | 15-425 | Open Top | Polypropylene | White | Bonded PTFE / Silicone | 250 | 1000 |
| 10796-636 | 15-425 | Open Top | Polypropylene | Black | Pre-Slit Bonded PTFE / Silicone | 250 | 250 |
| 10796-638 | 15-425 | Open Top | Polypropylene | Black | Pre-Slit Bonded PTFE / Silicone | 250 | 1000 |
| 89042-258 | 22-400 | Solid Top | Phenolic | Black | PTFE / 14B Rubber | 100 | 100 |
| 89042-260 | 22-400 | Solid Top | Phenolic | Black | PTFE / 14B Rubber | 100 | 500 |
| 89042-272 | 22-400 | Solid Top | Polypropylene | White | Bonded PTFE / Silicone | 100 | 100 |
| 89042-274 | 22-400 | Solid Top | Polypropylene | White | Bonded PTFE / Silicone | 100 | 500 |
| 89042-288 | 22-400 | Open Top | Polypropylene | White | Bonded PTFE / Silicone | 100 | 100 |
| 89042-290 | 22-400 | Open Top | Polypropylene | White | Bonded PTFE / Silicone | 100 | 500 |
| 66012-430 | 24-400 | Solid Top | Phenolic | Black | PTFE / 14B Rubber | 100 | 100 |
| 89042-262 | 24-400 | Solid Top | Phenolic | Black | PTFE / 14B Rubber | 100 | 500 |
| 89042-276 | 24-400 | Solid Top | Polypropylene | White | Bonded PTFE / Silicone | 100 | 100 |
| 89042-278 | 24-400 | Solid Top | Polypropylene | White | Bonded PTFE / Silicone | 100 | 500 |
| 89042-292 | 24-400 | Open Top | Polypropylene | White | Bonded PTFE / Silicone | 100 | 100 |
| 89042-294 | 24-400 | Open Top | Polypropylene | White | Bonded PTFE / Silicone | 100 | 500 |

Sampule® Vials

- Select from glass or HDPE
- Glass vials made from WHEATON 180 low potassium borosilicate glass that conforms to ASTM E 438 Type I, Class A and USP Type I requirements
- Background counts are consistent and low in glass vials; ultraviolet transmission is high
- HDPE vials are economical choice for scintillation counting
- Caps packaged separately
- For additional organization of your vials use the WHEATON Vial Rack 66022-569



Glass

HDPE

| Cat. No. | Size (mL) | Vial Material | Cap Material | Liner Material | Cap Size | Dia. x H (mm) | Qty / Case |
|-----------|-----------|---------------|---------------|-------------------|----------|---------------|------------|
| 66021-293 | 6 | Glass | Urea | Metal Foil / Pulp | 13-425 | 17 x 58 | 1000 |
| 66021-307 | 6 | Glass | Urea | Metal Foil / Pulp | 15-425 | 17 x 58 | 1000 |
| 66021-330 | 6 | HDPE | Polypropylene | Linerless | 18mm | 17 x 57 | 1000 |
| 66021-362 | 6 | HDPE | Polypropylene | Linerless | 18mm | 17 x 57 | 2000 |

Culture Vial

- Culture vials feature deep-skirted screw caps to allow safer, more dependable handling when working with infectious materials
- Vials are manufactured from WHEATON 33 low extractable borosilicate glass that conforms to USP Type I and ASTM E 438 Type I, Class A requirements
- Pre-attached deep skirted solid-top black phenolic screw cap with 14B rubber liner
- Autoclavable
- Vials packaged in corrugated trays with partitions
- Use M-T Vial File® (Cat. No. 66011-325) for storing 4mL vials and (Cat. No. 71000-066) for storing 8mL vials

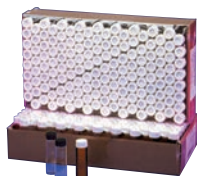


| Cat. No. | Size (mL) | *Dia. x H (mm) | Cap Size | Qty / Case |
|-----------|-----------|----------------|----------|------------|
| 66014-235 | 4 | 15 x 51 | 13-415 | 144 |
| 66014-240 | 8 | 17 x 70 | 15-415 | 144 |
| 66014-242 | 12 | 19 x 72 | 15-415 | 144 |

*Measurement taken with cap attached.

EPA Vial, 40mL

- Ideal for use in water sampling according to EPA 40 CFR 136, "Guidelines for Establishing Test Procedures for the Analysis of Pollutants"
- Clear vials manufactured from WHEATON 33 low extractable borosilicate glass that conforms to USP Type I and ASTM E 438 Type I, Class A requirements
- Amber vials manufactured from WHEATON 320 amber glass that conforms to USP Type I requirements for light transmission to protect light-sensitive products
- Caps attached to vials
- Vials packaged in convenient trays for ease of use



| Cat. No. | Size (mL) | Size (dr) | *Dia. x H (mm) | Cap Size | Qty / Case |
|-----------------------------------------------------------------------------------|-----------|-----------|----------------|----------|------------|
| Clear Vial with Open Top Black Phenolic PTFE Faced Silicone Lined Cap | | | | | |
| 14002-636 | 40 | 10 | 28 x 98 | 24-400 | 72 |
| Amber Vial with Open Top White Polypropylene PTFE Faced Silicone Lined Cap | | | | | |
| 80093-818 | 40 | 10 | 28 x 98 | 24-400 | 72 |

*Measurement taken with cap attached.

Replacement Screw Caps & Septa

| Cat. No. | Description | Cap Size | Qty / Case |
|-----------|-------------------------------------------------------------------------------------------------|----------|------------|
| 14227-238 | Black Phenolic Open Top Screw Cap w/o Septa | 24-400 | 200 |
| 89050-892 | 10 mils PTFE / 90 mils Silicone Septa for 24-400 Screw Cap | — | 100 |
| 80076-570 | White Glass-Filled Open Top Polypropylene Cap with Bonded 5 mils PTFE / 120 mils Silicone Septa | 24-400 | 200 |

Dilution Vial

- Vial is marked with a blue line at the 3mL level
- Vials are manufactured from WHEATON 33 low extractable borosilicate glass that conforms to USP Type I and ASTM E 438 Type I, Class A requirements
- Pre-attached solid-top black phenolic screw cap with 14B rubber liner
- Autoclavable
- Vials are packaged in corrugated trays with partitions
- Use M-T Vial File® (Cat. No. 66011-325) for storing vials



| Cat. No. | Size (mL) | *Dia. x H (mm) | Cap Size | Qty / Case |
|-----------|-----------|----------------|----------|------------|
| 66011-370 | 4 | 15 x 48 | 13-425 | 144 |

*Measurement taken with cap attached.

Vials for Environmental Analysis



| Cat. No. | Size (mL) | Size (dr) | Dia. x H (mm) (cap on) | Cap Size | Qty / Case |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|-----------|------------------------|----------|------------|
| Clear Vial with Open Top White Polypropylene PTFE Faced Silicone Lined Cap (Septa of 5 mils of PTFE facing 120 mils of silicone is bonded to cap.) | | | | | |
| 80076-578 | 20 | 5 | 28 x 60 | 24-400 | 72 |
| 80076-580 | 25 | 6.25 | 28 x 73 | 24-400 | 72 |
| 80076-582 | 40 | 10 | 28 x 98 | 24-400 | 72 |

Amber Vial with Open Top White Polypropylene PTFE Faced Silicone Lined Cap

(Septa of 5 mils of PTFE facing 120 mils of silicone is bonded to cap.)

| | | | | | |
|-----------|----|----|---------|--------|----|
| 80076-584 | 20 | 5 | 28 x 60 | 24-400 | 72 |
| 80076-586 | 40 | 10 | 28 x 98 | 24-400 | 72 |

Omni-Vial®, Polypropylene

- 4mL polypropylene vial for wide variety of lab applications
- Press-fit cap made from polypropylene
- Vials and caps are packed separately in two polybags containing 500 each
- Vial can be autoclaved for 15 minutes at 121°C at 15 psi



| Cat. No. | Size (mL) | Vial & Cap Material | Liner Material | Dia. x H (mm) | Qty / Case |
|-----------|-----------|---------------------|----------------|---------------|------------|
| 66021-238 | 4 | Polypropylene | Linerless | 13 x 57 | 500 |

Tamper Evident Safety Cap



- For use with Uni-Dose® Bottles and Vials
- Caps have Pulp / PVDC / PE Liner

| Cat. No. | Description | For Mouth OD (mm) | Qty / Case |
|-----------|-----------------------------------|-------------------|------------|
| 10796-562 | Cap for Uni-Dose® Bottle and Vial | 28.5 | 2500 |
| 10796-626 | Cap with "For Oral Use" Imprint | 28.5 | 5000 |
| 26676-413 | Crimper | 28.5 | 1 |

Uni-Dose® Bottle & Vial



- Available in amber glass or amber PET (Polyethylene Terephthalate)
- Mouth OD 28.5mm for Oral Dosing
- Use with WHEATON tamper evident safety cap
- Large labeling surface for easy product identification
- Manufactured from WHEATON 900 soda-lime amber glass that conforms to USP Type III requirements
- Safer alternative to glass and cost less to ship
- Use the 224316 Crimper to secure the tamper-evident safety caps (Cat. No. 10796-562 or W224199) to the bottle or vial

| Cat. No. | Size (mL) | Dia. x H (mm) | Trays/Case | Qty / Case |
|---------------------------|-----------|---------------|------------|------------|
| Amber Glass Bottle | | | | |
| 10796-176 | 15 | 32 x 42 | 5 | 500 |
| 10796-178 | 30 | 36 x 58 | 5 | 500 |
| 66020-452 | 60 | 43 x 83 | 2 | 200 |
| Amber PET Vial | | | | |
| 66014-226 | 15 | 32 x 42 | — | 450 |
| 66014-224 | 30 | 34 x 55 | — | 300 |





Crimpenstein® Stand



Crimpenstein® Kit



Crimpenstein® Balancer

Crimpenstein® Electric Crimper / Decapper

- Advanced ergonomic design engineered to save time
- Lightweight and easy to operate
- Quick change jaw-sets available in 11, 13 and 20mm sizes
- Electric powered for quick setup and high volume operations
- Adjustable jaw intensity with memory
- Crimper jaw attaches aluminum seal to bottle / vial and Decapper jaw removes the aluminum seal
- Provides fast, consistent results with a simple push of a button
- Packaged in convenient storage / carrying case



Ordering Information

| Cat. No. | Jaw(s) Included | Size (mm) | Qty / Case |
|-----------|-----------------------------|-----------|------------|
| 97021-328 | Crimper & Decapper | 11 | 1 |
| 97021-314 | Crimper | 11 | 1 |
| 97021-316 | Decapper | 11 | 1 |
| 97021-330 | Crimper & Decapper | 13 | 1 |
| 97058-906 | Flip Cap Crimper & Decapper | 13 | 1 |
| 97021-318 | Crimper | 13 | 1 |
| 97058-894 | Flip Cap Crimper | 13 | 1 |
| 97021-320 | Decapper | 13 | 1 |
| 97021-332 | Crimper & Decapper | 20 | 1 |
| 97058-908 | Flip Cap Crimper & Decapper | 20 | 1 |
| 97021-322 | Crimper | 20 | 1 |
| 97021-322 | Flip Cap Crimper | 20 | 1 |
| 97021-324 | Decapper | 20 | 1 |

Crimpenstein® Jaws

- Expands capability of Crimpenstein® Unit by adding different size Crimper and Decapper jaws that can be purchased separately
- Crimper jaw attaches aluminum seal to bottle / vial and Decapper jaw removes the aluminum seal

| Cat. No. | Jaw(s) | Size (mm) | Qty / Case |
|-----------|-----------------------------|-----------|------------|
| 97021-354 | Crimper and Decapper | 11 | 1 |
| 97021-340 | Crimper | 11 | 1 |
| 97021-342 | Decapper | 11 | 1 |
| 97021-356 | Crimper and Decapper | 13 | 1 |
| 97058-902 | Flip Cap Crimper & Decapper | 13 | 1 |
| 97021-344 | Crimper | 13 | 1 |
| 97058-898 | Flip Cap Crimper | 13 | 1 |
| 97021-346 | Decapper | 13 | 1 |
| 97021-358 | Crimper and Decapper | 20 | 1 |
| 97058-904 | Flip Cap Crimper & Decapper | 20 | 1 |
| 97021-348 | Crimper | 20 | 1 |
| 97058-900 | Flip Cap Crimper | 20 | 1 |
| 97021-350 | Decapper | 20 | 1 |

Crimpenstein® Stand

- Optional stand provides hands-free operation
- Holds the Crimpenstein® Unit in the vertical position for operations where vials need to be handled one at a time
- Stores two Crimper or Decapper Jaws of any size in the base of stand

| Cat. No. | Description | Qty / Case |
|-----------|--------------------|------------|
| 97021-334 | Crimpenstein Stand | 1 |

Crimpenstein® Balancer Accessory

- Balancer accessory enables weightless operation of the Crimpenstein® Unit
- Cable and hook assembly allows for suspending Crimpenstein® to a secure structure
- Spring tension is easily adjusted without tools using the hand operated adjustment knob
- Retractable cable allows Crimpenstein® to be safely stored above workstation when not in use
- Includes: 1 balancer reel, 2 stainless steel spacers, 2 machine screws, 1 lanyard, 8 cables ties and installation manual

| Part No. | Description | Qty / Case |
|-----------|----------------------------------|------------|
| 97058-910 | Crimpenstein® Balancer Accessory | 1 |

E-Z Crimper™

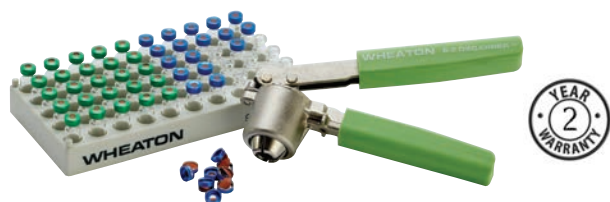
- Used to attach aluminum seals to bottles and vials with a crimp / serum finish
- Cushioned ergonomic handle reduces hand fatigue
- Labeled for quick size identification
- Polished crimping jaws provide consistent sealing



| Cat. No. | Description | Qty / Case |
|------------|---------------------------------------|------------|
| 80078-990 | Attaches 8mm Standard Aluminum Seals | 1 |
| 80078-992* | Attaches 11mm Standard Aluminum Seals | 1 |
| 80078-994 | Attaches 13mm Standard Aluminum Seals | 1 |
| 80078-996 | Attaches 20mm Standard Aluminum Seals | 1 |

*The 11mm E-Z Crimper™ is supplied with a plunger insert to give the option of crimping the top of a vial creating an extra tight seal. We recommend this only for standard opening vials.

E-Z Decapper™



- Used to remove aluminum seals from bottles and vials with crimp / serum finish
- Cushioned ergonomic handle reduces hand fatigue
- Labeled for quick size identification
- Autoclavable

| Cat. No. | Description | Qty / Case |
|-----------|--------------------------------------|------------|
| 80078-998 | Removes 8mm Standard Aluminum Seals | 1 |
| 80079-000 | Removes 11mm Standard Aluminum Seals | 1 |
| 80079-002 | Removes 13mm Standard Aluminum Seals | 1 |
| 80079-004 | Removes 20mm Standard Aluminum Seals | 1 |

Crimper / Decapper

- These crimpers are used for flip cap seals and for aluminum seals sizes 16.5, 28.5, and 30mm
- Not autoclavable



| Cat. No. | Description | Qty / Case |
|-----------|------------------------------------------|------------|
| 14217-400 | Crimper, attaches 13mm Flip Cap Seals | 1 |
| 14217-402 | Crimper, attaches 20mm Flip Cap Seals | 1 |
| 26676-413 | Crimper, attaches 28.5mm Uni-Dose® Seals | 1 |
| 26676-406 | Crimper, attaches 30mm Seals | 1 |
| 26676-426 | Decapper, removes 30mm Seals | 1 |

Plier Decapper

- An inexpensive and easy way to remove seals
- Made of steel with gray plastic-coated handles
- To remove a seal, simply secure the seal between the jaws, squeeze the handles and twist the seal



| Cat. No. | Description | Qty / Case |
|-----------|--------------------|------------|
| 26676-428 | Removes 13mm Seals | 1 |
| 74830-118 | Removes 20mm Seals | 1 |

Crimpmaster™ Crimping Station

- Compatible with standard hand crimpers
- Functions using any standard in-house air supply or compressed air cylinder
- This unit enables hand-operated crimpers and decappers to function in a semi-automatic mode
- Accepts most standard hand crimpers and decappers. Requires inlet air pressure of 25 to 40 psi, which may be obtained from a compressed air cylinder or your standard in-house air supply
- To operate, simply insert the proper crimper or decapper for the type of seal you wish to use and depress the foot switch
- Dimensions (H x D x W): 19 3/4" x 6" x 8-5/8"
(50.2 x 15.2 x 22cm)
- Weight: 13lb (5.9kg)



| Cat. No. | Description | Qty / Case |
|-----------|-------------------------------|------------|
| 26676-548 | Crimpmaster Crimping Station™ | 1 |

Vial Racks



9.5mm Well ID
96-Position 66022-580



12.5mm Well ID
50-Position 66022-478



12.5mm Well ID
50-Position 10066-476*



15.5mm Well ID
48-Position 66022-523



17.1 Well ID
90-Position 66022-569



23.1mm Well ID
36-Position 66022-556



28.1mm Well ID
50-Position 66022-525



30mm Well ID
50-Position 14007-178

- Manufactured from polypropylene
- Size of rack depends on vial OD
- Easy to clean and autoclavable
- Alphanumeric indexing indicated on rack
- The racks are sturdy and stackable, even when the vials are in place
- Each well has an opening in the bottom to facilitate drainage

When selecting the proper rack, the vial OD can not exceed the well ID dimension.

| Cat. No. | Well ID (mm) | Description | No. of Wells | Dimensions (L x W x H) | Qty / Case |
|---------------------------|--------------|------------------|------------------|------------------------|------------|
| Polypropylene Rack | | | | | |
| 66022-580 | 9.5 | 96-Position Rack | 8 deep x 12 wide | 18.5 x 12.5 x 2.2cm | 5 |
| 66022-478 | 12.5 | 50-Position Rack | 5 deep x 10 wide | 19 x 10 x 2.2cm | 5 |
| 10066-476* | 12.5* | 50-Position Rack | 5 deep x 10 wide | 19 x 10 x 2.2cm | 5 |
| 66022-523 | 15.5 | 48-Position Rack | 4 deep x 12 wide | 26.6 x 9.4 x 2.8cm | 5 |
| 66022-569 | 17.1 | 90-Position Rack | 6 deep x 15 wide | 33 x 17 x 3cm | 5 |
| 66022-556 | 23.1 | 36-Position Rack | 3 deep x 12 wide | 32.2 x 9.1 x 2.8cm | 5 |
| 66022-525 | 28.1 | 50-Position Rack | 5 deep x 10 wide | 33 x 17 x 3cm | 5 |
| 14007-178 | 30.0 | 50-Position Rack | 5 deep x 10 wide | 33.7 x 17 x 3cm | 5 |

*This rack is specially designed for use with Freestanding CryoELITE® Cryogenic Vials. The vials lock in the rack for one-handed cap removal.

M-T Vial File®



66011-303

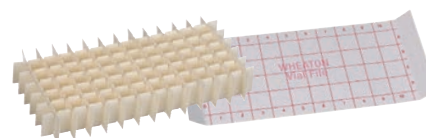


71000-068 / 20mL

- Clear plastic hinged case for convenient storage and transportation of sample vials
- Polycoated partitions protect vials from abrasion and breakage
- Alphanumeric index card provides for easy vial identification
- Extra partitions and index cards can be purchased separately

| Cat. No. | Description | Max Vial Size Dia. x H (mm) | Qty / Case |
|-----------|-----------------------|-----------------------------|------------|
| 66011-303 | Holds 60 – 2mL Vials | 13 x 42 | 6 |
| 66011-325 | Holds 40 – 4mL Vials | 16 x 49 | 6 |
| 71000-066 | Holds 54 – 8mL Vials | 18 x 64 | 6 |
| 71000-068 | Holds 24 – 20mL Vials | 30 x 64 | 6 |

Replacement Partitions and Index Cards for M-T Vial Files®



Partition

Index Card

| Cat. No. | Description | Qty / Case |
|-----------|------------------------------------|------------|
| 80076-624 | Partitions for Use with 66011-303 | 6 |
| 80076-626 | Partitions for Use with 66011-325 | 6 |
| 71000-074 | Partitions for Use with 71000-066 | 6 |
| 71000-076 | Partitions for Use with 71000-068 | 6 |
| 66011-308 | Index Cards for Use with 66011-303 | 35 |
| 80093-836 | Index Cards for Use with 66011-325 | 35 |
| 71000-070 | Index Cards for Use with 71000-066 | 35 |
| 71000-072 | Index Cards for Use with 71000-068 | 35 |



WHEATON



The WHEATON CryoELITE® Tissue Vial is for those who value sample integrity, designed specifically for tissue collection, transport and storage to provide the utmost protection. Different from cells and biofluids, tissue specimens have particular requirements for cryogenic storage. Offering researchers a uniform vial able to maintain sample integrity while maximizing storage capacity and organization, the CryoELITE Tissue Vials feature a wide-mouth opening, 5mL capacity and high integrity closure. The CryoELITE Tissue Vial offers researchers who work with tissue samples ease of use, convenience and security.

The CryoELITE Tissue Vials are manufactured from low binding, cryogenic-grade virgin polypropylene that meets the USP Class VI classification. Lot tested and certified to be free of pyrogens, RNase / DNase and endotoxins, the vials have a sample capacity of 5mL and a storage temperature range of -156°C to 121°C. The externally threaded cap provides a seal that exceeds DOT and IATA classifications for diagnostic specimens and their transport and is capable of maintaining a secure closure during freeze/thaw procedures. The vials have a flat bottom and a stippled external surface to promote easier handling.

The CryoELITE Tissue Vial is for those who value sample integrity, designed specifically for tissue collection, transport and storage to provide the ultimate protection. When your decision depends on sample integrity...Trust that specimen to a WHEATON CryoELITE Tissue Vial.



CryoELITE® Tissue Vial

- Lot certified RNase/DNase and Endotoxin Free providing assurance of product integrity
- Unrivaled cap seal exceeds DOT and IATA regulations ensuring ultimate protection of samples during transportation and demanding freeze-thaw handling
- Wide mouth for insertion and removal of tissue with forceps
- 5mL volume for use with tissue sections
- Directional indicators to allow orientation of tissue within vial

| Cat. No. | Size (mL) | Color | Sterile | Dimensions Dia. x H (mm) | Depth (mm) | Qty / Case |
|-----------|-----------|-------|---------|--------------------------|------------|------------|
| 89511-864 | 5 | White | Yes | 22 x 27 | 18 | 250 |

CryoELITE® Cryogenic Vials

- Lot certified RNase / DNase and endotoxin free and non-pyrogenic providing assurance for sample integrity
- Unrivaled cap seal exceeds DOT and IATA regulations ensuring ultimate protection of samples during transportation and demanding freeze-thaw handling
- Made from low binding, cryogenic grade virgin polypropylene
- Screw cap can be easily removed with one hand

Freestanding

- Loctagon™ Vial Skirt provides stability in freestanding position and locks into CryoELITE® Benchmate Rack in order to provide easy open and close with one hand
- Colored caps allow for color coding projects along with WHEATON colored freezer and storage boxes
- Optional 2D Data Matrix Bar Code Insert provides unique identifier for traceability
- Bottom format allows unrestricted view of 2D bar code for convenient automated scanning

Round Bottom

- Exacting round bottom allows for up to 17,000 MAX RCF (xG)

| Cat. No. | Size (mL) | Color | Writing Patch | Sterile | Dimensions Dia. x H (mm) | Qty / Case |
|--------------------------------------------------------|-----------|---------|---------------|---------|--------------------------|------------|
| CryoELITE® Vials, Freestanding, Internal Thread | | | | | | |
| 89125-464 | 1.2 | Natural | Yes | Yes | 12 x 40 | 500 |
| 89125-450 | 2 | Natural | Yes | No | 12 x 50 | 1000 |
| 89125-452 | 2 | Natural | No | No | 12 x 50 | 1000 |
| 89125-478 | 2 | Natural | Yes | Yes | 12 x 50 | 500 |
| 89125-466 | 2 | White | Yes | Yes | 12 x 50 | 500 |
| 89125-468 | 2 | Red | Yes | Yes | 12 x 50 | 500 |
| 89125-470 | 2 | Pink | Yes | Yes | 12 x 50 | 500 |
| 89125-472 | 2 | Yellow | Yes | Yes | 12 x 50 | 500 |
| 89125-474 | 2 | Green | Yes | Yes | 12 x 50 | 500 |
| 89125-476 | 2 | Blue | Yes | Yes | 12 x 50 | 500 |
| 89125-480 | 3 | Natural | Yes | Yes | 12 x 63 | 500 |
| 89125-482 | 4 | Natural | Yes | Yes | 12 x 77 | 500 |
| 89125-484 | 5 | Natural | Yes | Yes | 12 x 91 | 500 |

CryoELITE® Vials, Freestanding, External Thread

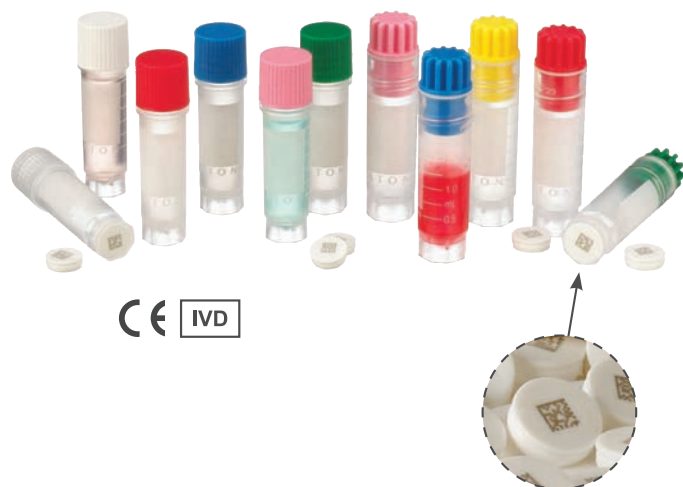
| | | | | | | |
|-----------|-----|---------|-----|-----|---------|------|
| 30620-972 | 0.5 | White | Yes | Yes | 12 x 49 | 500 |
| 89125-498 | 1.2 | Natural | Yes | Yes | 12 x 37 | 500 |
| 89125-490 | 2 | Natural | Yes | No | 12 x 49 | 1000 |
| 89125-492 | 2 | Natural | No | No | 12 x 49 | 1000 |
| 89125-512 | 2 | Natural | Yes | Yes | 12 x 49 | 500 |
| 89125-500 | 2 | White | Yes | Yes | 12 x 49 | 500 |
| 89125-502 | 2 | Red | Yes | Yes | 12 x 49 | 500 |
| 10147-450 | 2 | Pink | Yes | Yes | 12 x 49 | 500 |
| 89125-506 | 2 | Yellow | Yes | Yes | 12 x 49 | 500 |
| 89125-508 | 2 | Green | Yes | Yes | 12 x 49 | 500 |
| 89125-510 | 2 | Blue | Yes | Yes | 12 x 49 | 500 |
| 89125-514 | 3 | Natural | Yes | Yes | 12 x 63 | 500 |
| 89125-516 | 4 | Natural | Yes | Yes | 12 x 78 | 500 |
| 89125-518 | 5 | Natural | Yes | Yes | 12 x 93 | 500 |

CryoELITE® Vials, Round Bottom, Internal Thread

| | | | | | | |
|-----------|-----|---------|-----|-----|---------|------|
| 89125-454 | 1.2 | Natural | Yes | Yes | 12 x 39 | 500 |
| 89125-456 | 2 | Natural | Yes | Yes | 12 x 49 | 500 |
| 89125-446 | 2 | Natural | Yes | No | 12 x 49 | 1000 |
| 89125-448 | 2 | Natural | No | No | 12 x 49 | 1000 |
| 89125-458 | 3 | Natural | Yes | Yes | 12 x 63 | 500 |
| 89125-460 | 4 | Natural | Yes | Yes | 12 x 76 | 500 |
| 89125-462 | 5 | Natural | Yes | Yes | 12 x 90 | 500 |

CryoELITE® Vials, Round Bottom, External Thread

| | | | | | | |
|-----------|-----|---------|-----|-----|---------|------|
| 89125-494 | 1.2 | Natural | Yes | Yes | 12 x 35 | 500 |
| 89125-496 | 2 | Natural | Yes | Yes | 12 x 49 | 500 |
| 89125-486 | 2 | Natural | Yes | No | 12 x 49 | 1000 |
| 89125-488 | 2 | Natural | No | No | 12 x 49 | 1000 |



E-Z Microtube

- Polypropylene
- Uniquely numbered to ensure zero duplicated
- Fully traceable for perfect data management
- For storage down to -196°C
- Long lasting performance stability
- Supplied in a standard format 96-well rack with locking lid
- 1.0 and 1.4mL tubes supplied in standard twist-lock 96-well rack with locking lid

| Cat. No. | Volume (mL) | Description | Qty / Case |
|-----------|-------------|-------------------------------|------------|
| 89501-320 | 0.5 | E-Z Microtube, PP, 2D Barcode | 10 |
| 89501-322 | 1.0 | E-Z Microtube, PP, 2D Barcode | 10 |
| 89501-324 | 1.4 | E-Z Microtube, PP, 2D Barcode | 10 |

CryoELITE® Cryogenic Vials Shelf Packs

- Packed in convenient
- Smaller quantities
- 2 packs of 50 vials

| Cat. No. | Size (mL) | Color | Writing Patch | Sterile | Dimensions Dia. x H (mm) | Qty / Case |
|--------------------------------------------------------|-----------|---------|---------------|---------|--------------------------|------------|
| CryoELITE® Vials, Freestanding, External Thread | | | | | | |
| 89232-002 | 2 | White | Yes | Yes | □ 12 x 49 | 100 |
| 89232-004 | 2 | Red | Yes | Yes | ■ 12 x 49 | 100 |
| 89232-006 | 2 | Pink | Yes | Yes | ■ 12 x 49 | 100 |
| 89232-008 | 2 | Yellow | Yes | Yes | ■ 12 x 49 | 100 |
| 89232-010 | 2 | Green | Yes | Yes | ■ 12 x 49 | 100 |
| 89232-012 | 2 | Blue | Yes | Yes | ■ 12 x 49 | 100 |
| 89232-014 | 2 | Natural | Yes | Yes | 12 x 49 | 100 |

CryoELITE® Cryogenic Vials, Pre-inserted Barcodes

- CryoELITE vials w/ 2D Data Matrix Barcode insert already applied

| Cat. No. | Size (mL) | Color | Writing Patch | Sterile | Dimensions Dia. x H (mm) | Qty / Case |
|--------------------------------------------------------|-----------|--------|---------------|---------|--------------------------|------------|
| CryoELITE® Vials, Freestanding, External Thread | | | | | | |
| 10147-772 | 2 | White | Yes | Yes | □ 12 x 49 | 100 |
| 10147-448 | 2 | Red | Yes | Yes | ■ 12 x 49 | 100 |
| 10147-450 | 2 | Pink | Yes | Yes | ■ 12 x 49 | 100 |
| 10147-452 | 2 | Yellow | Yes | Yes | ■ 12 x 49 | 100 |
| 10147-454 | 2 | Green | Yes | Yes | ■ 12 x 49 | 100 |
| 10147-460 | 2 | Blue | Yes | Yes | ■ 12 x 49 | 100 |

2D Data Matrix Bar Code Bottom Insert

- When purchasing WHEATON CryoELITE® freestanding vials, you can purchase an optional 2D Data Matrix Bar Code Insert that allows for immediate bar coding of your samples. The insert can also be applied to the vial at a future date, which eliminates jeopardizing the integrity of your sample by transferring it to another vial
- 2D Data Matrix Bar Code Insert press fits and locks into place in bottom of vial

| Cat. No. | Description | Sterile | Qty / Case |
|-----------|---------------------------------------|---------|------------|
| 89134-438 | 2D Data Matrix Bar Code Bottom Insert | No | 500 |

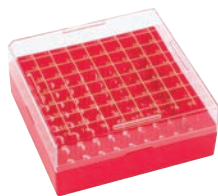
CryoELITE® Technical Information

| | |
|-------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|
| Material: | Made from low binding, cryogenic grade virgin polypropylene |
| Temperature Range: | -156°C to +121°C, tested to -196°C |
| Sterility: | Lot Certified Sterile, Radiation Sterilization |
| DNase & RNase Free: | Lot Certified, Ethidium Bromide (EtBr) Agarose Gel Electrophoresis Analysis |
| Non-Pyrogenic, Endotoxin Free: | Lot Certified < 0.500 EU/mL (Kinetic Turbidimetric LAL Method, FDA guideline) |
| Seal psi: | Exceeds 15 psi / 1 atmosphere / 95kPa pressure tested |
| IATA (International Air Transportation Association): | Can be used as a primary receptacle for the Transport of Diagnostic Specimens as outlined by the IATA Dangerous Goods Regulations, Part 6.3.5 |
| DOT (U.S. Department of Transportation): | Exceeds U.S. DOT 49 CFR Parts 171-180 requirements for Diagnostic Specimen Packing and Transportation Requirements |
| Liquid Nitrogen: | Liquid phase tested / Vapor phase accepted |
| Autoclavable: | Recommended at +121°C, 15 psi (1 bar) for 20 minutes |
| Cap Pigmentation: | Cap colors were chosen to ensure no reactivity with common biological samples |
| 2D Data Matrix Capacity: | Numeric 16 / Alphanumeric 10 |
| 2D Data Matrix Symbol Size: | Row x Column: 14 x 14 |
| CE: | Product is CE compliant to The European <i>In Vitro</i> Diagnostic Medical Devices Directive 98/79/EC |

KeepIT® Freezer Boxes



KeepIT®-25



KeepIT®-81 & 100

- KeepIT® Freezer Boxes provide an ideal method for batching and storing samples
- Six different colors match the colors of CryoELITE® Cryogenic Vials, creating alternatives for batching and identifying groups of samples
- KeepIT®-25 accommodates up to 25 internal or external threaded cryogenic Vial Sizes: 1.2 - 2mL
- KeepIT®-100 accommodates up to 100 internal threaded cryogenic vials and the KeepIT®-81 accommodates 81 external threaded cryogenic vials (sizes: 1.2 - 2mL)
- Openings in bottom facilitate scanning CryoELITE® 2D Data Matrix Bar Code Inserts
- Made from Eastman Tritan™ BPA free, shatter resistant resin
- Standard footprint compatible with liquid nitrogen storage shelves and freezer drawers

| Cat. No. | Color | Dimensions (L x W x H) (mm) | Qty / Case |
|----------------------------------------------------------|--------|-----------------------------|------------|
| KeepIT®-25 For External Thread Vials | | | |
| 89495-478 | White | 75 x 75 x 52 | 10 |
| 89495-472 | Red | 75 x 75 x 52 | 10 |
| 89495-474 | Pink | 75 x 75 x 52 | 10 |
| 89495-476 | Yellow | 75 x 75 x 52 | 10 |
| 89495-480 | Green | 75 x 75 x 52 | 10 |
| 89495-482 | Blue | 75 x 75 x 52 | 10 |
| Low Profile KeepIT®-81 For External Thread Vials | | | |
| 89495-488 | White | 130 x 130 x 52 | 10 |
| 89495-484 | Red | 130 x 130 x 52 | 10 |
| 89495-486 | Pink | 130 x 130 x 52 | 10 |
| 89495-490 | Yellow | 130 x 130 x 52 | 10 |
| 89495-492 | Green | 130 x 130 x 52 | 10 |
| 89495-494 | Blue | 130 x 130 x 52 | 10 |
| Low Profile KeepIT®-100 For Internal Thread Vials | | | |
| 89495-500 | White | 130 x 130 x 52 | 10 |
| 89495-496 | Red | 130 x 130 x 52 | 10 |
| 89495-498 | Pink | 130 x 130 x 52 | 10 |
| 89495-502 | Yellow | 130 x 130 x 52 | 10 |
| 89495-504 | Green | 130 x 130 x 52 | 10 |
| 89495-506 | Blue | 130 x 130 x 52 | 10 |

CryoELITE® Benchmate Rack



- For use with both freestanding and round bottom vials
- One hand cap removal of freestanding vials
- Holds 50 cryogenic vials
- Manufactured from polypropylene
- Easily cleaned in an automatic washer or autoclavable at 121°C for 20 minutes
- Non-skid feet offer additional stability for bench work
- Stackable
- Well ID: 12.5mm
- Dimensions (L x W x H): (190 x 100 x 22mm)

| Cat. No. | Description | No. of Wells | Qty / Case |
|-----------|------------------|------------------|------------|
| 10066-476 | 50-Position Rack | 5 deep x 10 wide | 5 |

CryoFile® and CryoFile® XL Storage Boxes



- Use with cryogenic vials
- Partitions numbered from 1 – 81 for easy content identification
- Numbering system printed on lid and bottom of box
- Six colors provide easy sample identification
- Water repellent allows for longer durability
- For use with vapor phase of liquid nitrogen
- Directional holes in bottom allow for drainage and orientation of bottom to top of box
- Dimensions (L x W x H): CryoFile® (130 x 130 x 52mm) / CryoFile® XL (130 x 130 x 97mm) / CryoFile® Tissue Box (130 x 130 x 26mm)

| Cat. No. | Fits | Color | Qty / Case |
|--------------------------------------------------------|------------------|--------|------------|
| CryoFile® Storage Box - (Holds 81 Vials) | | | |
| 89092-376 | 1.2 & 2mL Vials | Green | 15 |
| 89092-384 | 1.2 & 2mL Vials | Yellow | 15 |
| 89092-380 | 1.2 & 2mL Vials | Pink | 15 |
| 89092-388 | 1.2 & 2mL Vials | White | 15 |
| 89092-392 | 1.2 & 2mL Vials | Blue | 15 |
| 89092-396 | 1.2 & 2mL Vials | Red | 15 |
| CryoFile® XL Storage Box - (Holds 81 Vials) | | | |
| 89092-376 | 3, 4 & 5mL Vials | Green | 15 |
| 89092-384 | 3, 4 & 5mL Vials | Yellow | 15 |
| 89092-382 | 3, 4 & 5mL Vials | Pink | 15 |
| 89092-390 | 3, 4 & 5mL Vials | White | 15 |
| 89092-394 | 3, 4 & 5mL Vials | Blue | 15 |
| 89092-398 | 3, 4 & 5mL Vials | Red | 15 |
| CryoFile® Tissue Storage Box - (Holds 25 Vials) | | | |
| 89511-870 | 5mL Tissue Vials | Green | 15 |
| 89511-868 | 5mL Tissue Vials | Yellow | 15 |
| 89511-874 | 5mL Tissue Vials | Pink | 15 |
| 89511-876 | 5mL Tissue Vials | White | 15 |
| 89511-866 | 5mL Tissue Vials | Blue | 15 |
| 89511-872 | 5mL Tissue Vials | Red | 15 |

FTA® Nucleic Acid Collection Storage box



- Storage boxes provide an ideal method for batching and storing FTA Nucleic Acid Collection pouches
- For use with small or large FTA cards
- Accommodates two rows of 3" FTA card pouches or one row of 6" FTA Card Pouches
- Removable divider for use with smaller pouches
- Water repellent box material allows for longer durability
- For use at RT, 4°C, -20°C or colder

| Cat. No. | Dimensions (L x W x H) (in) | Qty / Case |
|-----------|-----------------------------|------------|
| 89495-470 | 18 x 6 x 4 | 2 |
| 10796-640 | 18 x 7 x 4 | 4 |



SingleScan™ Bar Code Reader

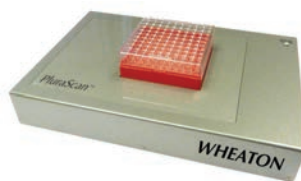
- Plug and play design enables easy set up with no software installation required
- USB interface allows easy connection to computer
- Reads 1D linear bar codes and 2D Data Matrix bar codes on any vial or ampule
- Inputs decoded bar code ID into any software application where cursor is placed



| Cat. No. | Description | Qty |
|-----------|-----------------------------|-----|
| 89194-788 | SingleScan™ Bar Code Reader | 1 |

PluraScan™ Bar Code Reader

- 2D Data Matrix Bar Code Reader
- Works with WHEATON KeepIT® Boxes and WHEATON CryoELITE® Cryogenic Vials and Cryule® Ampules as well as WHEATON E-Z Microtubes
- Flexible software integration
- Integrated frost reduction system allows multiple racks to be read
- Capable of reading bar codes from wide range of manufacturers and label printers



| Cat. No. | Description | Qty |
|-----------|----------------------------|-----|
| 89232-016 | PluraScan™ Bar Code Reader | 1 |

2D Data Matrix Bar Code Bottom Insert

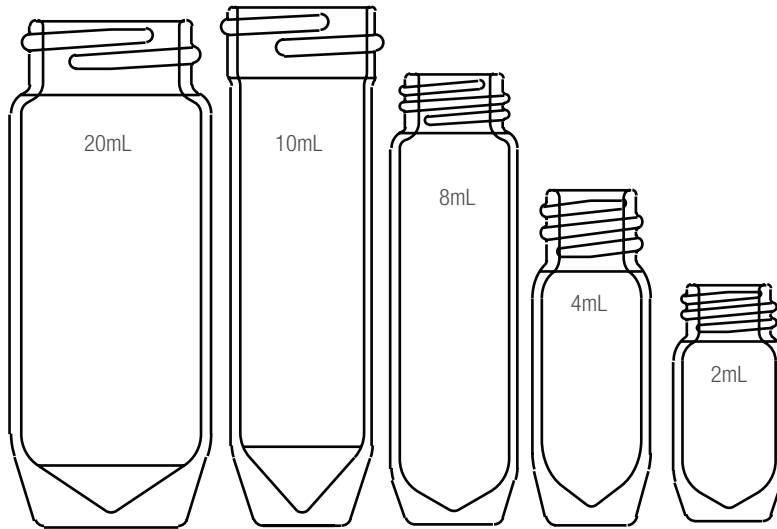
- When purchasing WHEATON CryoELITE® freestanding vials, you can purchase an optional 2D Data Matrix Bar Code Insert that allows for immediate bar coding of your samples. The insert can also be applied to the vial at a future date, which eliminates jeopardizing the integrity of your sample by transferring it to another vial
- 2D Data Matrix Bar Code Insert press fits and locks into place in bottom of vial

| Cat. No. | Description | Sterile | Qty / Case |
|-----------|---------------------------------------|---------|------------|
| 89134-438 | 2D Data Matrix Bar Code Bottom Insert | No | 500 |

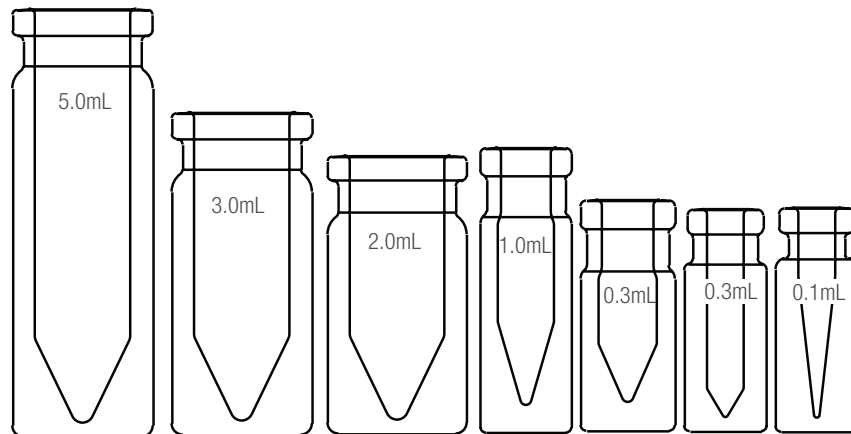
WHEATON Scanners Technical Information

| | SingleScan™ | PluraScan™ |
|-------------------------------|---------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------|
| Code Formats | 1D Linear | ✓ |
| | 2D Data Matrix | ✓ |
| | ISO 16022 | ✓ |
| | Square Rectangular Format | ✓ |
| | ECC 200 | ✓ |
| | 0-20 Grid Sizes | ✓ |
| | White on Black Black on White | ✓ |
| | Numeric | ✓ |
| | Alphanumeric | ✓ |
| Sensor Type | 1.3 million pixel CMOS sensor | CCD Image Sensor |
| Light Source | Class 2M visible laser diode at 630nm | CCFL (Cold Cathode Fluorescent Light Source) |
| Dimensions (W x D x H) | 61mm x 167mm x 41.2mm | 75cm x 50cm x 30cm |
| Power | USB Hub (5V) | AC 100 to 240V, +10%/-10%, Less than 8W |
| User Interface | Keyboard Wedge | WHEATON GUI, including Windows® operating system TCP / IP, ODBC |
| Cable Interface | USB | USB2.0 USB 1.1 (B Type) |
| Operating System | Factory configured for Windows® operating systems compatibility. Also compatible with non-windows operating systems | Windows®7, 2000, XP |
| Ambient Operating Temperature | 5 to 50°C | |
| Storage Temperature | -20 to 65°C | |
| Operating Humidity | (Non-condensing) 5 to 95°C | |

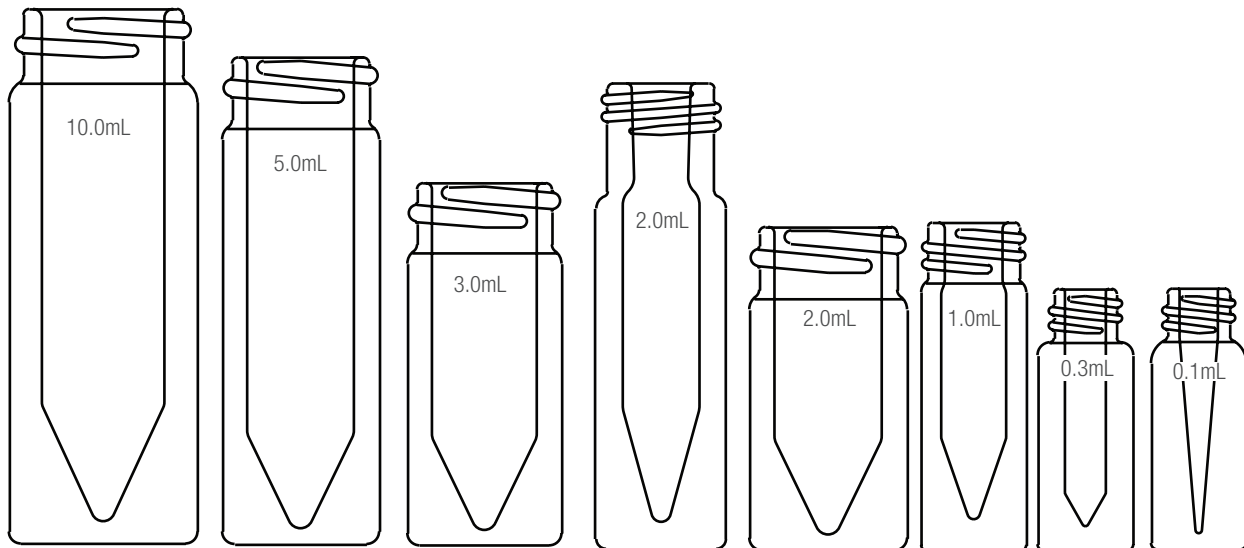
E-Z Ex-Traction® Vials (Approximate Size)



NextGen™ V Vials® (Approximate Size)



Crimp / Serum Finish

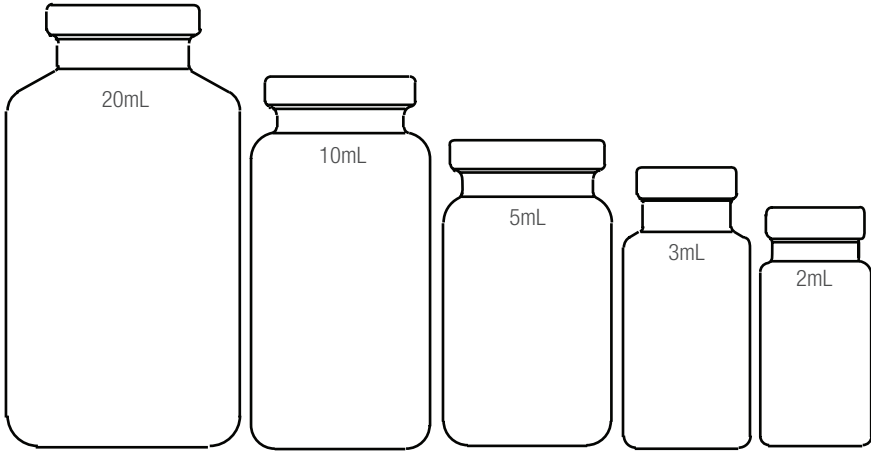


Screw Thread Vials

Serum Bottles and Vials (Approximate Size)



Serum Bottles



Serum Vial



E-Z Extraction, Cryule, Vacule, CryoELITE, KeepIT, CryoFile, V Vials, Omni-Vial, M-T Vial File, Sampule, Lab File, Shorty Vials, Vial File, Uni-Dose, Crimpenstein, SciLutions and WHEATON are registered trademarks of WHEATON Industries Inc. Loctagon, NextGen, SingleScan, PluraScan, Mini-File, E-Z Crimper, E-Z Decapper, and Crimpmaster are trademarks of WHEATON Industries Inc. Eastman Tritan™ is a trademark of Eastman Chemical Co.

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