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Scientific**  
INC.

*People you trust. Values you count on.*

**SAFETY**



**Kimble®**

A WORLD OF EXPERTISE IN YOUR HANDS



### KimCote®

Choose KimCote® plastic-coated glassware for an added measure of safety. KimCote® protective glassware coating goes beyond traditional coatings. Should a break occur, it will reduce the hazards of shattered glass and leakage of toxic or corrosive chemicals. It's ultra-clear, extremely durable, autoclavable and resistant to many common laboratory chemicals. The unique KimCote® texture also provides a non-slip handling surface, wet or dry.

### KIMAX® Colorware

Choose KIMAX® Colorware for easy identification in the lab. Glassware with colored decorations can help minimize the possibility for cross contamination, and can help identify the glassware designated to certain labs.

### Heavy Duty Glassware

Heavy duty glassware provides superior strength and durability and is ideal for applications where mechanical shock is more likely to occur.

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## KimCote® Class A Cylinders with Reverse Graduations

KimCote® Class A cylinder is marked with a reverse metric scale.

- KimCote® safety coating reduces the hazards of shattered glass
- "TD" appears on each cylinder and indicates the cylinder is calibrated to deliver
- Cylinder is marked with a white, reverse, single metric scale
- Hexagonal base is flat ground for stability
- SAFE-GARD® bumper is supplied
- Designed from ASTM Specification E1272, Style I, Class A requirements
- Manufactured from 33 expansion, low extractable borosilicate glass conforming to USP Type I and ASTM E438, Type I, Class A requirements



Part Number	Capacity (mL)	Height (mm)	Case Qty
KC20028W-100	100	255	1
KC20028W-250	250	330	1
KC20028W-500	500	375	1
KC20028W-1000	1000	460	1
KC20028W-2000	2000	520	1

## 2000mL Atmospheric Environmental Bottles

The design of our Atmospheric Environmental Bottle is recommended by the Atmospheric Environment Service (AES). Available in either a single or double valve configuration.

Several unique design features include:

- KimCote® plastic safety coating
- Borosilicate glass high vacuum plug valve stems instead of PTFE stems, eliminating the chance of outgassing
- FKM valve stem o-rings that are easily changed
- Inlet stems ground to 1/2" OD
- Manufactured from 33 expansion, low extractable borosilicate glass conforming to USP Type I and ASTM E438, Type I, Class A requirements



Part Number	Capacity (mL)	Feature	Case Qty
653200-2000	2000	Single Valve	1
653210-2000	2000	Double Valve	1

## KimCote® Reservoir Bottles with Bottom Hose Outlet

Designed to store and discharge liquids via a bottom hose outlet.

- Kimble® KIMAX® KimCote® safety-coated reservoir bottle
- Glass hose connection outlet is fused to the bottle
- White enamel marking spot
- Manufactured from 33 expansion, low extractable borosilicate glass conforming to USP Type I and ASTM E438, Type I, Class A requirements



Part Number	Capacity (mL)	Neck ID (mm)	Case Qty
KC14607-250	250	18	6
KC14607-500	500	22	6
KC14607-1000	1000	27	4
KC14607-2000	2000	27	4
KC14607-5000	5000	42	1
KC14607-10000	10000	58	1
KC14607-20000	20000	58	1

## KimCote® Heavy Duty Serum Bottles

The heavy duty construction of these bottles is designed to prolong life expectancy with harder than normal usage. Ideal for packaging and storage.



- Kimble® KIMAX® KimCote® plastic-coated bottle with rounded shoulders.
- Neck is tooled for a uniform fit with a #8 rubber stopper
- Manufactured from 33 expansion, low extractable borosilicate glass conforming to USP Type I and ASTM E438, Type I, Class A requirements

Part Number	Capacity (mL)	Height x OD (mm)	Case Qty
KC14960-4	4000	310 x 167	1
KC14960-9	9000	412 x 203	1

## Plastic Safety-Coated Heavy Duty Carboys

Designed for storage of solutions and ideal for media preparation.

- Autoclavable safety coating reduces the hazards of shattered glass and leakage of toxic or corrosive chemicals
- With sloping shoulders of the carboy-style
- Neck is tooled for a uniform fit with a #12 rubber stopper
- 5 gallon size is designed from Federal Specification DD-B-597
- Manufactured from 33 expansion, low extractable borosilicate glass conforming to USP Type I and ASTM E438, Type I, Class A requirements



Accessories include carboy clamp and silicone stopper assemblies

- 3-port platinum-cured stopper assembly and sanitary PVDF clamp to provide sterile fluid transfer with no extractables, as required in bio-tech and pharmaceutical applications
- The stopper ports are designed to connect 1/8", 1/4" (4-port stopper has two 1/4" tubes) and 3/8" silicone tubing
- The silicone tubing provided is cut into 2' lengths
- Non-sterile
- Autoclavable
- These assemblies are specifically designed to fit all sizes of KIMAX® 14950 solution (carboy) bottles

Part Number	Capacity (mL)	Height x OD (mm)	Case Qty
KC14950-25	9500	392 x 222	1
KC14950-35	13200	448 x 257	1
KC14950-120			1
KC14950-500	19000	502 x 294	1

## Accessories

Part Number	Description	Case Qty
14950C-12	Clamp	1
14950S-321	Stopper, 3 port	1
14950S-2321	Stopper, 4 port	1



## KimCote® Solution Bottles with Color-Coded PTFE Flathead Stoppers

Designed for storage of solutions and ideal for media preparation.

- Autoclavable KimCote® safety coating reduces the hazards of shattered glass and leakage of toxic or corrosive chemicals
- Narrow mouth increases mechanical strength
- Bottle necks are Standard Taper ground to accept flathead color-coded PTFE stoppers
- Replacement stoppers are 41941
- Manufactured from 33 expansion, low extractable borosilicate glass conforming to USP Type I and ASTM E438, Type I, Class A requirements



Part Number	Capacity (mL)	Standard Taper Stopper Size	Case Qty
KC15097-100	100	14	12
KC15097-250	250	19	6
KC15097-500	500	24	6
KC15097-1000	1000	29	6
KC15097-2000	2000	29	1



### Replacement Parts

Part Number	Description	Case Qty
850540-0014	Solid, Red, Flathead, PTFE Bottle Stopper size 14, 14.5mm Diameter at Large End, 20mm Length of Ground Zone, 10mm Height Above Standard Taper Grind	1
850540-0024	Solid, Blue, Flathead, PTFE Bottle Stopper size 24, 24mm Diameter at Large End, 30mm Length of Ground Zone, 13mm Height Above Standard Taper Grind	1
41941R-24	Solid, Blue, Flathead, PTFE Bottle Stopper size 24, 24mm Diameter at Large End, 30mm Length of Ground Zone, 13mm Height Above Standard Taper Grind	6
41941R-29	Solid, Green, Flathead, PTFE Bottle Stopper size 29, 29.2mm Diameter at Large End, 35mm Length of Ground Zone, 13mm Height Above Standard Taper Grind	6

## KimCote® Narrow Mouth Solution Bottles

Designed for storage of solutions and ideal for media preparation.

- Autoclavable KimCote® safety coating reduces the hazards of shattered glass and leakage of toxic or corrosive chemicals
- Narrow mouth increases mechanical strength
- Manufactured from 33 expansion, low extractable borosilicate glass conforming to USP Type I and ASTM E438, Type I, Class A requirements



Part Number	Capacity (mL)	OD (mm)	Neck ID (mm)	Rubber Stopper Size	Case Qty
KC15093-10000	10000	230	58	12	1
KC15093-20000	20000	290	58	12	1

## KimCote® GL 45 Media Bottles

Ideal for general laboratory use including mixing, storing or transporting culture media, chemicals or solvents.



- Autoclavable KimCote® safety coating reduces the hazards of shattered glass and leakage of toxic or corrosive chemicals
- Enhanced graduations and marking spot made with chemically resistant white enamel paint
- 30 mm ID opening
- Blue polypropylene linerless GL 45 screw thread cap
- Replaceable clear (natural) drip-free polypropylene pour ring is included on each bottle
- Manufactured from 33 expansion, low extractable borosilicate glass conforming to USP Type I and ASTM E438, Type I, Class A requirements

Part Number	Capacity (mL)	Height x OD (mm)	Case Qty
KC14395-100	100	100 x 56	4
KC14395-250	250	138 x 70	4
KC14395-500	500	176 x 86	4
KC14395-1000	1000	225 x 101	4
KC14395-2000	2000	260 x 136	4
KC14395-5000	5000	330 x 181	1
KC14395-10000	10000	410 x 227	1

### Replacement Parts

Part Number	Description	Case Qty
14395C-45	Blue Polypropylene GL-45 Solid Top Screw Thread Cap, Max. Temp. 140° C	10
14395P-45	Clear Polypropylene GL-45 Bottle Pour Ring, Max. Temp. 140° C	10

## KimCote® KIMAX® Squibb Separatory Funnels

Kimble® KIMAX® KimCote® plastic-coated pear-shaped funnel.

- Supplied with a Standard Taper ground glass stopper and a totally autoclavable PTFE stopcock plug
- Lower stems have an ID large enough so that a column of liquid will "break" with the stopcock closed, thereby giving a more complete separation and eliminating the necessity of emptying the funnel
- Replacement stopper is 850100
- Designed from ASTM Specification E1096, Type IV requirements
- Manufactured from 33 expansion, low extractable borosilicate glass conforming to USP Type I and ASTM E438, Type I, Class A requirements

Part Number	Capacity (mL); Stopper Size	Stem Length (mm)	Case Qty
KC29048T-125	125; 22	60	4
KC29048T-250	250; 22	60	4
KC29048T-500	500; 27	60	4
KC29048T-1000	1000; 27	60	1
KC29048T-2000	2000; 38	60	1

### Replacement Parts

Part Number	Description	Case Qty
850100-0022	Size 22 Solid Pennyhead Stopper, Medium Length	1
850100-0027	Size 27 Solid Pennyhead Stopper, Medium Length	1
850100-0038	Size 38 Hollow Pennyhead Stopper, Medium Length	1



### KimCote® Reusable Screw Thread Culture Tubes with Unattached Caps

KIMAX® KimCote® plastic-coated culture tube is made from tubing with uniform wall thickness for maximum heat transfer and chemical resistance.

- KimCote® safety coating reduces the hazards of shattered glass and leakage of toxic or hazardous materials
- Ideal for biohazard test protocols
- Provided with phenolic screw-thread caps, unattached
- Designed from ASTM E982, Type VI, Class A requirements
- Manufactured from 33 expansion, low extractable borosilicate glass conforming to USP Type I and ASTM E438, Type I, Class A requirements



Part Number	Capacity (mL); GPI Finish	OD x Length (mm)	Case Qty
KC45066-13100	8; 13-415	13 x 100	144
KC45066-16125	16; 15-415	16 x 125	144
KC45066-20150	30; 18-415	20 x 150	96
KC45066-25150	50; 24*410	25 x 150	48

### Accessories - Black Phenolic Caps with Cemented-In Rubber Liners

- Specially formulated phenolic cap material
- Autoclavable
- White rubber liners
- Excellent for general laboratory use
- Identified in ASTM Specification E982, Class A requirement



Part Number	Cap Height (mm)	GPI Finish	Case Qty
45066B-13	14	13-415	300
45066B-15	16	15-415	300
45066B-18	18	18-415	225
45066B-24	19	24-410	150

### Accessories - Black Phenolic Screw Thread Caps with PTFE-Faced Rubber Liners

- Excellent for general laboratory use
- Specially formulated phenolic resin and liner adhesive to withstand the effects of repeated autoclaving
- PTFE faced/general purpose white rubber liners are highly resistant to chemical effects
- Identified in ASTM Specification E982, Class A requirements



Part Number	Cap Height (mm)	GPI Finish	Case Qty
45066C-13	14	13-415	300
45066C-15	16	15-415	300
45066C-18	18	18-415	225
45066C-24	19	24-410	150

### KimCote® Heavy Wall Round Bottom Flasks

Kimble® KIMAX® KimCote® plastic-coated single neck flask useful as a rotary evaporator condensate collection flask or as a replacement for European designation KS 20/35.

- Spherical socket joint
- Autoclavable KimCote® safety coating reduces the hazards of shattered glass and leakage of toxic or corrosive chemicals
- Manufactured from 33 expansion, low extractable borosilicate glass conforming to USP Type I and ASTM E438, Type I, Class A requirements



Part Number	Capacity (mL)	Spherical Joint Size	Case Qty
KC25330-100	100	35/20	1
KC25330-250	250	35/25	1
KC25330-500	500	35/25	1
KC25330-1000	1000	35/25	1
KC25330-2000	2000	35/25	1

### ULTRA-WARE® Filtering Flasks with KimCote®

- These Erlenmeyer-style flasks are manufactured from heavy-wall borosilicate glass to ensure the mechanical strength needed for vacuum filtration
- Autoclavable KimCote® safety coating reduces the hazards of shattered glass and leakage of toxic or corrosive chemicals
- The plastic safety coating is steam-autoclavable
- The 125 mL flask has a No. 5 stopper joint
- The 1, 2 and 4 liter flasks have a No. 8 stopper joint
- All flasks have a side arm for connection to 3/8" (6 mm) ID flexible tubing
- Manufactured from 33 expansion, low extractable borosilicate glass conforming to USP Type I and ASTM E438, Type I, Class A requirements



A second flask should be connected between the filtering flask and the vacuum source to prevent accidental entry of the filtrate into the vacuum line or pump.

Part Number	Capacity (mL)	Rubber Stopper Joint	Case Qty
953760-0122	125	#5	1
953760-1002	1000	#8	1
953760-2002	2000	#8	1
953760-4002	4000	#8	1

### KimCote® Recovery Flasks

Kimble® KIMAX® KimCote® plastic-coated single neck flask with a Standard Taper outer joint designed for easy recovery of reaction products.

- Autoclavable KimCote® safety coating reduces the hazards of shattered glass and leakage of toxic or corrosive chemicals
- Even wall thickness and minimum runout make these flasks ideal for use with rotary evaporators
- Heavy wall
- Square joint bead
- Total contents are accessible with a spatula or policeman
- Lower portion fits standard heating mantles
- Manufactured from 33 expansion, low extractable borosilicate glass conforming to USP Type I and ASTM E438, Type I, Class A requirements



Part Number	Capacity (mL)	Standard Taper Joints	Case Qty
KC25165-50	50	24/40	1
KC25165-100	100	24/40	1
KC25165-200	200	24/40	1
KC25165-500	500	24/40	1
KC25165-1000	1000	24/40	1

### Choose KimCote® Plastic-Coated Glassware for an Added Measure of Safety!

KimCote® protective glassware coating goes beyond traditional coatings. Should a break occur, KimCote® will reduce the hazards of shattered glass and leakage of toxic or corrosive chemicals. It's ultra-clear, extremely durable, autoclavable and resistant to many common laboratory chemicals. KimCote's unique texture also provides a non-slip handling surface, wet or dry.

An MSDS and a certificate of compliance are available by contacting Kimble Chase customer service.

KimCote® is a trademark of Kimble Chase.



### KimCote® Class A Volumetric Flasks with Pennyhead Glass Stopper

- Autoclavable KimCote® safety coating reduces the hazards of shattered glass and leakage of toxic or corrosive chemicals
- A single graduation ring is blasted on the neck
- Calibrated to contain
- A Standard Taper ground glass stopper is supplied
- Marking spots on all sizes
- Designed from ASTM Specification E288, Class A requirements
- Manufactured from 33 expansion, low extractable borosilicate glass conforming to USP Type I and ASTM E438, Type I, Class A requirements



Part Number	Capacity (mL)	Standard Taper Stopper	Case Qty
KC28014-100	100	13	12
KC28014-250	250	16	12
KC28014-500	500	19	12
KC28014-1000	1000	22	4
KC28014-2000	2000	27	2

#### Replacement Parts



Part Number	Description	Case Qty
850100-0013	Size 13 Solid Pennyhead Stopper, Medium Length	1
850100-0016	Size 16 Solid Pennyhead Stopper, Medium Length	1
850100-0019	Size 19 Solid Pennyhead Stopper, Medium Length	1
850100-0022	Size 22 Solid Pennyhead Stopper, Medium Length	1
850100-0027	Size 27 Solid Pennyhead Stopper, Medium Length	1

### KimCote® GL 45 Screw Cap Erlenmeyer Flasks

These KIMAX® KimCote® plastic-coated Erlenmeyer flasks have large opening, GL 45 thread closures to make filling easier and provide tight seals during storage.

- Flasks come with blue polypropylene caps and clear pour rings
- Autoclavable KimCote® safety coating reduces the hazards of shattered glass and leakage of toxic or corrosive chemicals
- Marking spots and scales are durable white ceramic enamel
- Manufactured from 33 expansion, low extractable borosilicate glass conforming to USP Type I and ASTM E438, Type I, Class A requirements



Part Number	Capacity (mL)	GPI Finish	Case Qty
KC26720-250	250	GL 45	6
KC26720-500	500	GL 45	6
KC26720-1000	1000	GL 45	4
KC26720-2000	2000	GL 45	2

#### Replacement Parts



Part Number	Description	Case Qty
14395C-45	Blue Polypropylene GL-45 Solid Top Screw Thread Cap, Max. Temp. 140° C	10
14395P-45	Clear Polypropylene GL-45 Bottle Pour Ring, Max. Temp. 140° C	10

### Heavy Wall Graduated Filtering Flasks with Quick-Release Hose Barb Connectors

KIMAX® heavy wall filter flasks have a quick-release connector designed as a safety feature.



- Hose barb accommodates 1/4 inch ID tubing
- Tubing can remain permanently attached since the opposite end is designed to be easily assembled via a positive threaded seal
- Proper positioning of the connector provides greater flask stability, as tubing angled downward has less tendency to tilt the flask
- Flasks are designed for vacuum to 29" of mercury
- Made with a heavier wall than a standard Erlenmeyer flask
- Manufactured from 33 expansion, low extractable borosilicate glass conforming to USP Type I and ASTM E438, Type I, Class A requirements

Part Number	Capacity (mL)	Rubber Stopper Size	Case Qty
27070-250	250	6	2
27070-500	500	7	8
27070-1000	1000	8	1
27070-2000	2000	9	1
27070-4000	4000	12	1

#### Replacement Parts



Part Number	Case Qty
736400-1413	1

### Heavy Wall Graduated Filtering Flasks with Detachable Plastic Sidearms

- Detachable autoclavable plastic sidearm designed to accept 5/16 inch ID flexible tubing (U.S. Patent 3,268,300)
- Sidearm has two ears to provide a finger grip for easy insertion into a neoprene bushing by turning the plastic piece
- Opening in the sidearm is larger at the flask end to hold a cotton plug securely
- Made with a heavier wall than a standard Erlenmeyer flask
- All flasks have durable white ceramic enamel scales to indicate approximate volumes at various levels
- Designed from ASTM Specification E1406, Type III, Class II requirements
- Manufactured from 33 expansion, low extractable borosilicate glass conforming to USP Type I and ASTM E438, Type I, Class A requirements



Part Number	Capacity (mL)	Rubber Stopper Size	Case Qty
27065-250	250	6	18
27065-500	500	7	18
27065-1000	1000	8	12
27065-2000	2000	9	1
27065-4000	4000	12	1

#### Replacement Parts



Part Number	Case Qty
DP27067-99	1

## Heavy Wall Graduated Filtering Flasks with Side Tubulation

KIMAX® flasks with side tubulation.



- Capacity scale
- Flasks are designed for vacuum to 29" of mercury
- Made with a heavier wall than a standard Erlenmeyer flask
- All sizes have side hose connection designed to accept 5/16 inch ID flexible tubing
- Manufactured from 33 expansion, low extractable borosilicate glass conforming to USP Type I and ASTM E438, Type I, Class A requirements

Part Number	Capacity (mL)	Graduation Range (mL), Subdivision (mL)	Case Qty
27060-25	25	5-25, 5	18
27060-50	50	20-50, 10	18
27060-125	125	50-125, 25	18
27060-250	250	50-250, 25	18
27060-500	500	150-500, 50	18
27060-1000	1000	300-1000, 50	12
27060-2000	2000	600-2000, 100	1
27060-4000	4000	1000-4000, 250	1

## Class A RAY-SORB® Heavy Duty Wide Mouth Volumetric Flasks without Stoppers

- RAY-SORB® processed to protect materials sensitive to the light of shorter wavelengths
- Less than 1% transmission below 400 nm and approximately 5% transmission from 400-600 nm
- Pipet access is easy with wide-mouth volumetric flasks
- Superior strength, durability and safety from heavy, uniform walls
- Quick identification with large, permanent, easy-to-read, markings
- Flat interior bottoms for stirring with standard stir bars
- Graduated to Class A volumetric tolerances for wide-mouth flasks
- Manufactured from 33 expansion, low extractable borosilicate glass conforming to USP Type I and ASTM E438, Type I, Class A requirements and then RAY-SORB® processed



Part Number	Capacity; Tolerance (mL)	Standard Taper Stopper Size	Case Qty
92822N-5	5; ±0.08	13	6
92822N-10	10; ±0.08	13	6
92822N-20	20; ±0.08	13	6
92822N-25	25; ±0.08	13	6
92822N-50	50; ±0.08	13	6
92822N-100	100; ±0.10	16	6
92822N-200	200; ±0.10	19	6
92822N-250	250; ±0.10	19	6
92822N-500	500; ±0.20	19	6
92822N-1000	1000; ±0.30	22	1
92822N-2000	2000; ±0.50	27	1

## Class A RAY-SORB® Heavy Duty Wide Mouth Volumetric Flasks with PTFE Stoppers

- RAY-SORB® processed to protect materials sensitive to the light of shorter wavelengths
- Less than 1% transmission below 400 nm and approximately 5% transmission from 400-600 nm
- Pipet access is easy with wide-mouth volumetric flasks
- Superior strength, durability and safety from heavy, uniform walls
- Quick identification with large, permanent, easy-to-read, markings
- Flat interior bottoms for stirring with standard stir bars
- Graduated to Class A volumetric tolerances for wide-mouth flasks
- PTFE Standard Taper stopper provides excellent chemical resistance
- Manufactured from 33 expansion, low extractable borosilicate glass conforming to USP Type I and ASTM E438, Type I, Class A requirements and then RAY-SORB® processed



Part Number	Capacity; Tolerance (mL)	Standard Taper Stopper Size	Case Qty
92822F-5	5; ±0.08	13	6
92822F-10	10; ±0.08	13	6
92822F-20	20; ±0.08	13	6
92822F-25	25; ±0.08	13	6
92822F-50	50; ±0.08	13	6
92822F-100	100; ±0.10	16	6
92822F-200	200; ±0.20	19	6
92822F-250	250; ±0.20	19	6
92822F-500	500; ±0.20	19	6
92822F-1000	1000; ±0.30	22	1
92822F-2000	2000; ±0.50	27	1

## Replacement Parts



Part Number	Description	Case Qty
41901R-13	Size 13 Orange PTFE Key-Head Stopper, Diameter at Large End 13.4 mm, Length of Ground Zone 14.0 mm	6
41901R-16	Size 16 Blue PTFE Key-Head Stopper, Diameter at Large End 16.5 mm, Length of Ground Zone 15.0 mm	6
41901R-19	Size 19 Green PTFE Key-Head Stopper, Diameter at Large End 19.7 mm, Length of Ground Zone 17.0 mm	6
41901R-22	Size 22 Yellow PTFE Key-Head Stopper, Diameter at Large End 22.05 mm, Length of Ground Zone 20.5 mm	6
41901R-27	Size 27 Red PTFE Key-Head Stopper, Diameter at Large End 27.15 mm, Length of Ground Zone 21.5 mm	6

### Class A RAY-SORB® Heavy Duty Wide Mouth Volumetric Flasks with Pennyhead Glass Stoppers

- RAY-SORB® processed to protect materials sensitive to the light of shorter wavelengths
- Less than 1% transmission below 400 nm and approximately 5% transmission from 400-600 nm
- Pipet access is easy with wide-mouth volumetric flasks
- Superior strength, durability and safety provided by heavy, uniform walls
- Quick identification with large, permanent, easy-to-read, markings
- Flat interior bottoms for stirring with standard stir bars
- Graduated to Class A volumetric tolerances for wide-mouth flasks
- Glass Standard Taper stoppers
- Manufactured from 33 expansion, low extractable borosilicate glass conforming to USP Type I and ASTM E438, Type I, Class A requirements and then RAY-SORB® processed



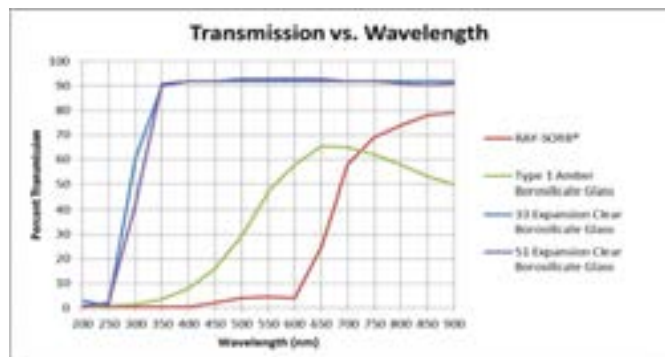
Part Number	Capacity; Tolerance (mL)	Standard Taper Stopper Size	Case Qty
92822G-5	5; ±0.08	13	6
92822G-10	10; ±0.08	13	6
92822G-20	20; ±0.08	13	6
92822G-25	25; ±0.08	13	6
92822G-50	50; ±0.08	13	6
92822G-100	100; ±0.10	16	6
92822G-200	200; ±0.20	19	6
92822G-250	250; ±0.20	19	6
92822G-500	500; ±0.20	19	6
92822G-1000	1000; ±0.30	22	1
92822G-2000	2000; ±0.50	27	1

### Class A RAY-SORB® Heavy Duty Wide Mouth Volumetric Flasks with Polyethylene Stoppers

- RAY-SORB® processed to protect materials sensitive to the light of shorter wavelengths
- Less than 1% transmission below 400 nm and approximately 5% transmission from 400-600 nm
- Pipet access is easy with wide-mouth volumetric flasks
- Superior strength, durability and safety from heavy, uniform walls
- Quick identification with large, permanent, easy-to-read, markings
- Flat interior bottoms for stirring with standard stir bars
- Calibrated to contain and graduated to Class A volumetric tolerances for wide-mouth flasks
- Polyethylene Standard Taper stoppers
- Manufactured from 33 expansion, low extractable borosilicate glass conforming to USP Type I and ASTM E438, Type I, Class A requirements and then RAY-SORB® processed



Part Number	Capacity; Tolerance (mL)	Standard Taper Stopper Size	Case Qty
92822P-5	5; ±0.08	13	6
92822P-10	10; ±0.08	13	6
92822P-20	20; ±0.08	13	6
92822P-25	25; ±0.08	13	6
92822P-50	50; ±0.08	13	6
92822P-100	100; ±0.10	16	6
92822P-200	200; ±0.20	19	6
92822P-250	250; ±0.20	19	6
92822P-500	500; ±0.20	19	6
92822P-1000	1000; ±0.30	22	1
92822P-2000	2000; ±0.50	27	1



### Replacement Parts

Part Number	Description	Case Qty
28160R-13	Size 13 Linear High-Density Polyethylene Stopper	6
28160R-16	Size 16 Linear High-Density Polyethylene Stopper	6
28160R-19	Size 19 Linear High-Density Polyethylene Stopper	6
28160R-22	Size 22 Linear High-Density Polyethylene Stopper	6
28160R-27	Size 27 Linear High-Density Polyethylene Stopper	6

### Low Form Heavy Duty Beakers

KIMAX® low form heavy duty glass “thick wall” beakers offer superior mechanical strength and durability. Improved safety when used under extreme conditions such as mechanized washing and rough handling.



- Thick uniform walls throughout and extra wall thickness built into the evenly tooled top rim
- Uniformity of construction allows for use on hot plates
- All sizes have a durable matte finish marking area and a white graduated scale
- Design meets ASTM Specification E960, Type II requirements
- Manufactured from 33 expansion, low extractable borosilicate glass conforming to USP Type I and ASTM E438, Type I, Class A requirements

Part Number	Capacity (mL)	Height x OD (mm)	Case Qty
14005-250	250	92 x 67	48
14005-400	400	114 x 77	48
14005-600	600	122 x 87	36
14005-1000	1000	152 x 107	24
14005-2000	2000	190 x 130	8
14005-4000	4000	252 x 161	4

### Colorware Low Form Griffin Beakers

Choose KIMAX® Low Form Griffin “Colorware” glass beakers for ease of identification in the lab. These beakers offer excellent mechanical strength and durability, while providing high resistance to chemical attack and thermal shock.



- Use of colored beakers reduces the risk of cross contamination
- Easily identify glassware between labs
- Available in four fabulous colors – Bright Blue, Cool Green, Sunny Yellow, and Raging Red
- All sizes feature double capacity scales with easy-to-read graduations
- Durable, color, matte finish marking area for use with an ordinary pencil or marker
- Design meets ASTM Specification E960, Type I requirements
- Manufactured from 33 expansion, low extractable borosilicate glass conforming to USP Type I and ASTM E438, Type I, Class A requirements

Part Number	Capacity (mL)	Color	Case Qty
14000B-50	50	Bright Blue	12
14000B-100	100	Bright Blue	12
14000B-150	150	Bright Blue	12
14000B-250	250	Bright Blue	12
14000B-400	400	Bright Blue	12
14000B-600	600	Bright Blue	6
14000B-1000	1000	Bright Blue	6
14000G-50	50	Cool Green	12
14000G-100	100	Cool Green	12
14000G-150	150	Cool Green	12
14000G-250	250	Cool Green	12
14000G-400	400	Cool Green	12
14000G-600	600	Cool Green	6
14000G-1000	1000	Cool Green	6
14000R-50	50	Raging Red	12
14000R-100	100	Raging Red	12
14000R-150	150	Raging Red	12
14000R-250	250	Raging Red	12
14000R-400	400	Raging Red	12
14000R-600	600	Raging Red	6
14000R-1000	1000	Raging Red	6
14000Y-50	50	Sunny Yellow	12
14000Y-100	100	Sunny Yellow	12
14000Y-150	150	Sunny Yellow	12
14000Y-250	250	Sunny Yellow	12
14000Y-400	400	Sunny Yellow	12
14000Y-600	600	Sunny Yellow	6
14000Y-1000	1000	Sunny Yellow	6

### Colorware Narrow Mouth Erlenmeyer Flasks

Available with markings in four colors, the KIMAX® Colorware flasks are brighter in appearance than traditional glassware with white markings. These flasks are also commonly used to help reduce cross-contamination and for easy identification of glassware between labs.



- All flasks have durable, colored, ceramic enamel scales to indicate approximate volumes at various levels
- Tops are reinforced and tooled with a rounded finish, containing more glass to give them maximum mechanical strength
- Body is thick-walled, with a long tapered outside contour to minimize chipping when struck or rubbed together
- Designed from ASTM Specification E1404, Type I, Class I requirements
- Manufactured from 33 expansion, low extractable borosilicate glass conforming to USP Type I and ASTM E438, Type I, Class A requirements

Part Number	Capacity (mL)	Color, Rubber Stopper Size	Case Qty
26500B-50	50	Bright Blue, 1	12
26500B-125	125	Bright Blue, 5	12
26500B-250	250	Bright Blue, 6	12
26500B-500	500	Bright Blue, 7	6
26500B-1000	1000	Bright Blue, 9	6
26500G-50	50	Green, 1	12
26500G-125	125	Green, 5	12
26500G-500	500	Green, 7	6
26500G-1000	1000	Green, 9	6
26500Y-50	50	Yellow, 1	12
26500Y-125	125	Yellow, 5	12
26500Y-250	250	Yellow, 6	12
26500Y-500	500	Yellow, 7	6
26500Y-1000	1000	Yellow, 9	6
26500R-50	50	Red, 1	12
26500R-125	125	Red, 5	12
26500R-250	250	Red, 6	12
26500R-500	500	Red, 7	6
26500R-1000	1000	Red, 9	6



Choose KIMAX® Colorware for Easy Identification in the Lab

- Help reduce cross contamination
- Easily identify glassware between labs
- Matte-finish marking spots for use with pencil or marker



## Class A Colorware Flasks

Available with markings in four colors, the KIMAX® Colorware flasks are brighter in appearance than traditional glassware with white markings. These flasks are also commonly used to help reduce cross-contamination and for easy identification of glassware between labs.



- KIMAX® flask with a single graduation ring blasted on the neck, calibrated to contain
- A Standard Taper ground glass stopper is supplied, along with a durable, color, matte finish marking area for use with an ordinary pencil
- Replacement stopper is 850100
- Designed from ASTM Specification E288, Class A requirements
- Manufactured from 33 expansion, low extractable borosilicate glass conforming to USP Type I and ASTM E438, Type I, Class A requirements

Part Number	Capacity (mL); Stopper Size	Color	Case Qty
28014R-25	25; 9	Raging Red	6
28014R-50	50; 9	Raging Red	6
28014R-100	100; 13	Raging Red	6
28014R-250	250; 16	Raging Red	6
28014R-500	500; 19	Raging Red	6
28014R-1000	1000; 22	Raging Red	1
28014Y-25	25; 9	Sunny Yellow	6
28014Y-50	50; 9	Sunny Yellow	6
28014Y-100	100; 13	Sunny Yellow	6
28014Y-250	250; 16	Sunny Yellow	6
28014Y-500	500; 19	Sunny Yellow	6
28014Y-1000	1000; 22	Sunny Yellow	1
28014E-25	25; 9	Cool Green	6
28014E-50	50; 9	Cool Green	6
28014E-100	100; 13	Cool Green	6
28014E-250	250; 16	Cool Green	6
28014E-500	500; 19	Cool Green	6
28014E-1000	1000; 22	Cool Green	1
28014B-25	25; 9	Bright Blue	6
28014B-50	50; 9	Bright Blue	6
28014B-100	100; 13	Bright Blue	6
28014B-250	250; 16	Bright Blue	6
28014B-500	500; 19	Bright Blue	6
28014B-1000	1000; 22	Bright Blue	1

## Replacement Parts



Part Number	Description	Case Qty
850100-0009	Size 9 Solid Pennyhead Stopper, Medium Length	1
850100-0013	Size 13 Solid Pennyhead Stopper, Medium Length	1
850100-0016	Size 16 Solid Pennyhead Stopper, Medium Length	1
850100-0019	Size 19 Solid Pennyhead Stopper, Medium Length	1
850100-0022	Size 22 Solid Pennyhead Stopper, Medium Length	1

## Closed System, Sterile Tissue Grinders for Maximum User Safety and Convenience

- Grinding occurs within a closed system for your protection
- Exposure to sample aerosols is eliminated
- Narrow pestles eliminate sample overflow
- Convenient and easy-to-use
- CS1 for standard grinding and CS2 for more aggressive grinding

CS1 and CS2 Sterile Tissue Grinders are easy to use and designed for your safety. The molded-in abrasive surface on the CS1 pestle tip leaves no sediment to obstruct sample examination. CS2 grinders have vitrified tips for more aggressive grinding of tougher tissues. Each grinder comes with a fully assembled pestle, a conical sample tube with solid top cap, an adhesive identification label and an instruction card. All are gamma sterilized in easy-open Tyvek® packs. Tubes are made of PP, pestles are 30% glass-filled PP and caps are HDPE.

## Sterile Closed-System Tissue Grinders

- Closed System 1 sterile tissue grinders are easy to use and designed for your safety
- Tissues are ground within a sealed container to minimize the risk of personal contact - exposure to sample aerosols is eliminated
- Narrow pestles eliminate the potential of sample overflow common with other types of grinders
- The molded-in abrasive surface on the pestle tip leaves no sediment to obstruct sample examination
- Each grinder comes with a fully assembled pestle, a conical sample tube with solid top cap, an adhesive identification label and an instruction card.
- All are gamma-sterilized in easy-open Tyvek® packs
- Tubes are made of PP, pestles are 30% glass-filled PP and caps are HDPE



Part Number	Capacity (mL)	Case Qty
749600-0015	15	10
749600-0050	50	10

## Sterile Closed-System Tissue Grinders with Vitrified Tip

Closed System 2 sterile tissue grinders are the same as the CS1 grinders but with a vitrified tip for more aggressive grinding of difficult samples.



- The proprietary silica casting process results in a glass-like abrasive tip surface that makes it easier to homogenize fibrous samples
- The closed system design allows for grinding to take place within a sealed container
- Each grinder comes with a fully assembled pestle, a conical sample tube with solid top cap, an adhesive identification label and an instruction card
- All are gamma-sterilized in easy-open Tyvek® packs
- Tubes are made of PP, pestles are 30% glass-filled PP, caps are HDPE and vitrified tips are cast silica

Part Number	Capacity (mL)	Case Qty
749610-0015	15	10
749610-0050	50	10

## Biomasher II® Closed System Disposable Tissue Homogenizers

Closed system tissue homogenizer (tube with pestle) ideal for homogenizing of animal tissues and organs as well as plant materials, insects, DNA, RNA, proteins, yeasts and enzymes.

- Micro-sized version of our CS1 and CS2 disposable, closed system tissue homogenizers
- Pestle with a molded-in shaft guard to minimize potential exposure to hazardous materials
- Abrasive surfaces on the pestle tip and inner tube area ensure efficient grinding of samples
- Available both sterile and non-sterile
- The tube is clear polypropylene and the pestle is polyacetal
- 749625-0010 is packaged in a bulk pack configuration
- 749625-0020 and 749625-0030 are individually wrapped



Part Number	Capacity (mL)	Sterile/Non-sterile	Case Qty
749625-0010	1.5	Non-sterile	50
749625-0020	1.5	Non-sterile	50
749625-0030	1.5	Sterile	50

## DUALL® Tissue Grinders with Glass Pestles and KimCote® Glass Tubes

- Similar to 885450 series but with plastic safety coating
- KimCote® plastic coating on tube will contain the homogenate if the tube breaks or cracks during motor-driven homogenization
- The coating is transparent, allowing an unobstructed view of the homogenate
- Replacement components are available and completely interchangeable
- Clearance between pestles and tubes is 0.004" to 0.006"
- Manufactured from 33 expansion, low extractable borosilicate glass conforming to USP Type I and ASTM E438, Type I, Class A requirements



Part Number	Size; Working Capacity (mL)	Pestle Shaft OD (mm)	Case Qty
885460-0020	20; 1	6	1
885460-0021	21; 3	6	1
885460-0022	22; 5	8	1
885460-0023	23; 15	10	1
885460-0024	24; 30	10	1
885460-0025	24; 50	16	1

## Replacement Parts

Part Number	Description	Case Qty
885451-0021	Size 21 Pestle for DUALL® Tissue Grinder	1
885451-0022	Size 22 Pestle for DUALL® Tissue Grinder	1
885451-0023	Size 23 Pestle for DUALL® Tissue Grinder	1
885451-0024	Size 24 Pestle for DUALL® Tissue Grinder	1
885451-0025	Size 25 Pestle for DUALL® Tissue Grinder	1
885462-0020	Size 20 Plastic-Coated Tube for DUALL® Tissue Grinder	1
885462-0021	Size 21 Plastic-Coated Tube for DUALL® Tissue Grinder	1
885462-0022	Size 22 Plastic-Coated Tube for DUALL® Tissue Grinder	1
885462-0023	Size 23 Plastic-Coated Tube for DUALL® Tissue Grinder	1
885462-0024	Size 24 Plastic-Coated Tube for DUALL® Tissue Grinder	1
885462-0025	Size 25 Plastic-Coated Tube for DUALL® Tissue Grinder	1

## ULTRA-WARE® Economy Three-Hole Cap Systems

- The cap body is manufactured from PTFE and is supplied with a TFE/propylene o-ring and a polypropylene screw collar
- The connecting threads on the top of the cap use standard 1/4"-28 flangeless fittings
- Two of the ports have 1/8" through-holes; the third port has a 1/16" through-hole
- Assembly instructions included.
- ULTRA-WARE® flat bottom reservoirs have a plastic safety coating which blocks virtually all UV light up to 385 nm, preventing photodegradation of light-sensitive mobile phases
- Manufactured from 33 expansion, low extractable borosilicate glass conforming to USP Type I and ASTM E438, Type I, Class A requirements



Part Number	Reservoir Capacity (mL)	Case Qty
953930-1002	1000	1
953930-2002	2000	1
953930-5002	5000	1
953930-1003	10000	1

## Replacement Parts

Part Number	Description	Case Qty
953913-5000	Economy Three-Hole Cap - includes PTFE body, GL45 open top screw collar, and a size 216 TFE/propylene o-ring	1
953913-5001	PTFE Body for Economy Three-Hole Cap	1
953913-5001	PTFE Body for Economy Three-Hole Cap	1
953916-3002	2 µm All PEEK Inlet/Spurge Filter, OD 1.1", Length 0.8", Fits Tubing OD 1/8"	1
420821-0018	ETFE Flangeless Nut for 1/8" OD Tubing, 1/4"-28 Thread, Use with the 420822-Series Flangeless Ferrules	1
420822-0018	ETFE Flangeless Ferrule for 1/8" OD Tubing, for Use with 420821 Series Male Nuts	1
953913-0001	ETFE Nut Plug 1/4"-28, Used to Seal Ports with Flat Bottom 1/4"-28 Threads	1
420823-0018	1/8" OD x 0.063" ID x 10' FEP / PTFE Tubing	1
953902-0252	250 mL Flat Bottom HPLC Reservoir without Graduations, Overall Height 133 mm, Overall Diameter 73 mm	1
953902-0502	500 mL Flat Bottom HPLC Reservoir without Graduations, Overall Height 165 mm, Overall Diameter 89 mm	1
953902-1002	1000 mL Flat Bottom HPLC Reservoir without Graduations, Overall Height 205 mm, Overall Diameter 111 mm	1
953902-2002	2000 mL Flat Bottom HPLC Reservoir without Graduations, Overall Height 250 mm, Overall Diameter 138 mm	1
953902-5002	5000 mL Flat Bottom HPLC Reservoir without Graduations, Overall Height 320 mm, Overall Diameter 186 mm	1
953902-1003	10000 mL Flat Bottom HPLC Reservoir without Graduations, Overall Height 400 mm, Overall Diameter 234 mm	1
953902-2003	20000 mL Flat Bottom HPLC Reservoir without Graduations, Overall Height 490 mm, Overall Diameter 300 mm	1

## Accessories

### Fittings Kit

- Kit consists of 20' of 1/8" OD FEP PTFE tubing, 20 CTFE ferrules and 20 (1/4"-28) ETFE nuts

Part Number	Case Qty
953882-0000	1



**ULTRA-WARE® Four Valve Filtration/Delivery Caps**

Standard - 953981-0047

- Patent No. 5,397,467.
- This cap combines the mobile phase filtration, sparging/degassing, storage and delivery functions
- All tubing connections are made in the back of the cap, reducing the typical clutter of tubing at the reservoirs
- An integral check valve in the sparge port prevents the mobile phase from backing up into the gas lines
- A pressure release valve prevents the reservoir from being accidentally over-pressurized
- The 1/4" -28 fitting connections allow easy connection to any HPLC pump system
- Cap body is manufactured from glass-filled PTFE
- Cap will fit any reservoir or bottle with a GL 45 thread



THF-Resistant - 953981-6347

- Patent No. 5,397,467
- Tetrahydrofuran (THF), widely used as a mobile phase for GPC, attacks the CTFE valve stems and TFE/propylene o-rings used in the standard four valve cap
- This special THF-resistant version has 316 stainless steel wherever the standard system has CTFE and FFKM o-rings in place of the TFE/propylene o-rings
- This cap is also recommended for aggressive organic solutions such as chlorinated hydrocarbons, ethers and ketones
- Cap body is manufactured from glass-filled PTFE
- Cap will fit any reservoir or bottle with a GL 45 thread

Part Number	Filter Diameter (mm)	THF Resistance	Case Qty
953981-0047	47	No	1
953981-6347	47	Yes	1

**ULTRA-WARE® Five Valve Recirculation/Filtration Caps**

Standard - 953983-0047

- Patent No. 5,397,467
- Specially designed to permit the recirculation of mobile phase back into the reservoir while maintaining the helium sparged environment.
- This cap also performs stepwise filtration, sparging/degassing, storage and delivery to the HPLC pump
- An integral check valve prevents mobile phase from backing up into the gas lines
- A pressure release valve protects the reservoir from being accidentally over-pressurized
- The 1/4" -28 fitting connections allow easy connection to any HPLC pump system
- Cap body is manufactured from glass-filled PTFE
- Cap will fit any reservoir or bottle with a GL 45 thread



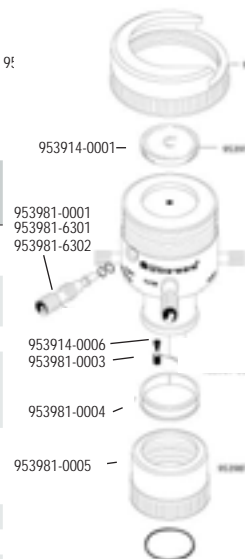
THF-Resistant - 953983-6347

- Patent No. 5,397,467
- Tetrahydrofuran (THF), widely used as a mobile phase for GPC, attacks the CTFE valve stems and TFE/propylene o-rings used in the standard Five Valve Cap
- This special THF-resistant version has 316 stainless steel wherever the standard system has CTFE, and FFKM o-rings in place of the TFE/propylene o-rings
- This cap is also recommended for aggressive organic solutions such as chlorinated hydrocarbons, ethers and ketones
- Cap body is manufactured from glass-filled PTFE
- Cap will fit any reservoir or bottle with a GL 45 thread

Part Number	Filter Diameter (mm)	THF Resistance	Case Qty
953983-0047	47	No	1
953983-6347	47	Yes	1

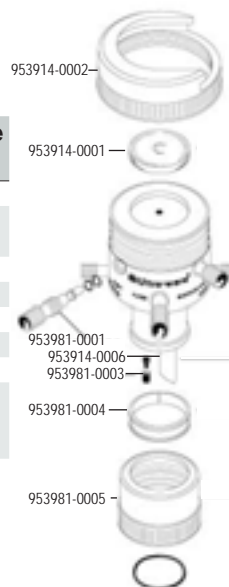
**Replacement Parts**

Part Number	Description	Case Qty
953914-0002	47 mm Upper Screw Clamp	1
953914-0001	47 mm 40-60 micron Porosity Glass Support Frit	1
953981-0001	Short CTFE Valve Stem	1
953981-6301	Valve Stem for Sparge and Pump Ports	1
953981-6302	Long Stainless Steel Valve Stem for Filter, Vent and Recirculate Ports	1
953914-0006	PTFE Drip Tip	1
953981-0003	Check Valve with Retainer	1
953981-0004	Lower Cap Retainer Ring	1
953981-0005	GL 45 Lower Screw Cap	1



**Replacement Parts**

Part Number	Description	Case Qty
953914-0002	47 mm Upper Screw Clamp	1
953914-0001	47 mm 40-60 micron Porosity Glass Support Frit	1
953914-0006	PTFE Drip Tip	1
953981-0003	Check Valve with Retainer	1
953981-0004	Lower Cap Retainer Ring	1
953981-0005	GL 45 Lower Screw Cap	1
953981-0005	GL 45 Lower Screw Cap	1
953981-6301	Short Stainless Steel Valve Stem for Sparge and Pump Ports	1
953981-6302	Long Stainless Steel Valve Stem for Filter, Vent and Recirculate Ports	1



**Accessories**

Part Number	Description	Case Qty
953984-0090	90 mm Base Adapter	1
953906-0090	90 mm Standard Pickup Adapter	1
953906-0047	47 mm Standard Pickup Adapter	1
953906-6390	90 mm THF-Resistant Pickup Adapter	1
953906-0047	47 mm Pickup Adapter	1
953906-6347	47 mm THF-Resistant Pickup Adapter	1



**Accessories**

Part Number	Description	Case Qty
953984-0090	90 mm Base Adapter	1
953906-6347	47 mm THF-Resistant Pickup Adapter	1
953906-6390	90 mm THF-Resistant Pickup Adapter	1
953906-0047	47 mm Standard Pickup Adapter	1
953906-0090	90 mm Standard Pickup Adapter	1



### Conical Bottom Reservoirs without Graduations

Designed for preparation, storage and delivery of all liquid chromatography mobile phases. As part of our ULTRA-WARE® series, these reservoirs are recommended for use under vacuum for filtration and vacuum degassing of mobile phase solvents.



- Plastic safety-coating blocks UV light up to 385nm, preventing photo-degradation of light-sensitive reagents
- Safety coating helps to retain glass fragments and allows a reasonable amount of time for the safe disposal of liquid contents
- Used with internal pressures up to 0.4 bar (6 psig) for helium sparging and blanketing of the mobile phase
- Operating Pressure: -1.0 to 0.4 bar (-14.5 psig to 6 psig)
- Conical bottom delivers all of the mobile phase without reservoir tilting
- Chemically inert glass prevents leaching of any extractables into the mobile phase solvents
- Supplied with GL-45 screw thread
- Manufactured from 33 expansion, low extractable borosilicate glass conforming to USP Type I and ASTM E438, Type I, Class A requirements

Part Number	Capacity (mL)	Overall Height x Diameter (mm)	Case Qty
953901-0252	250	203 x 85	1
953901-0502	500	230 x 105	1
953901-1002	1000	275 x 130	1
953901-2002	2000	319 x 150	1
953901-5002	5000	373 x 205	1
953901-1003	10000	433 x 255	1
953901-2003	20000	578 x 315	1

### Conical Bottom Reservoirs with Side Necks and Graduations

Designed for preparation, storage and delivery of all liquid chromatography mobile phases. As part of our ULTRA-WARE® series, these reservoirs are recommended for use under vacuum for filtration and vacuum degassing of mobile phase solvents.



- Plastic safety-coating blocks UV light up to 385nm, preventing photo-degradation of light-sensitive reagents
- Safety coating helps to retain glass fragments and allows a reasonable amount of time for the safe disposal of liquid contents
- Used with internal pressures up to 0.4 bar (6 psig) for helium sparging and blanketing of the mobile phase
- Operating Pressure: -1.0 to 0.4 bar (-14.5 psig to 6 psig)
- Conical bottom delivers all of the mobile phase without reservoir tilting
- Side neck allows addition of filtered solvent without removing delivery cap
- Chemically inert glass prevents leaching of any extractables into the mobile phase solvents
- Supplied with GL-45 screw thread
- Manufactured from 33 expansion, low extractable borosilicate glass conforming to USP Type I and ASTM E438, Type I, Class A requirements

Part Number	Capacity (mL)	Overall Height x Diameter (mm)	Case Qty
953910-1003	10000	433 x 255	1
953910-2002	2000	319 x 150	1
953910-2003	20000	578 x 315	1
953910-5002	5000	373 x 205	1

### Conical Bottom Reservoirs with Graduations

Designed for preparation, storage and delivery of all liquid chromatography mobile phases. As part of our ULTRA-WARE® series, these reservoirs are recommended for use under vacuum for filtration and vacuum degassing of mobile phase solvents.



- Plastic safety-coating blocks UV light up to 385nm, preventing photo-degradation of light-sensitive reagents
- Safety coating helps to retain glass fragments and allows a reasonable amount of time for the safe disposal of liquid contents
- Used with internal pressures up to 0.4 bar (6 psig) for helium sparging and blanketing of the mobile phase
- Operating Pressure: -1.0 to 0.4 bar (-14.5 psig to 6 psig)
- Conical bottom delivers all of the mobile phase without reservoir tilting
- Chemically inert glass prevents leaching of any extractables into the mobile phase solvents
- Supplied with GL-45 screw thread
- Manufactured from 33 expansion, low extractable borosilicate glass conforming to USP Type I and ASTM E438, Type I, Class A requirements

Part Number	Capacity (mL)	Overall Height x Diameter (mm)	Case Qty
953922-0252	250	203 x 85	1
953922-0502	500	230 x 105	1
953922-2002	2000	319 x 150	1
953922-5002	5000	373 x 205	1
953922-1003	10000	433 x 255	1
953922-2003	20000	578 x 315	1

### Flat Bottom Reservoirs without Graduations

Designed for preparation, storage and delivery of all liquid chromatography mobile phases. As part of our ULTRA-WARE® series, these reservoirs are recommended for use under vacuum for filtration and vacuum degassing of mobile phase solvents.



- Plastic safety-coating blocks UV light up to 385nm, preventing photo-degradation of light-sensitive reagents
- Safety coating helps to retain glass fragments and allows a reasonable amount of time for the safe disposal of liquid contents
- Used with internal pressures up to 0.4 bar (6 psig) for helium sparging and blanketing of the mobile phase
- Operating Pressure: -1.0 to 0.4 bar (-14.5 psig to 6 psig)
- Chemically inert glass prevents leaching of any extractables into the mobile phase solvents
- Supplied with GL-45 screw thread
- Manufactured from 33 expansion, low extractable borosilicate glass conforming to USP Type I and ASTM E438, Type I, Class A requirements

Part Number	Capacity (mL)	Overall Height x Diameter (mm)	Case Qty
953902-0252	250	133 x 73	1
953902-0502	500	165 x 89	1
953902-1002	1000	205 x 111	1
953902-2002	2000	250 x 138	1
953902-5002	5000	320 x 186	1
953902-1003	10000	400 x 234	1
953902-2003	20000	490 x 300	1

### Flat Bottom Reservoirs with Graduations

Designed for preparation, storage and delivery of all liquid chromatography mobile phases. As part of our ULTRA-WARE® series, these reservoirs are recommended for use under vacuum for filtration and vacuum degassing of mobile phase solvents.



- Plastic safety-coating blocks UV light up to 385nm, preventing photo-degradation of light-sensitive reagents
- Safety coating helps to retain glass fragments and allows a reasonable amount of time for the safe disposal of liquid contents
- Used with internal pressures up to 0.4 bar (6 psig) for helium sparging and blanketing of the mobile phase
- Operating Pressure: -1.0 to 0.4 bar (-14.5 psig to 6 psig)
- Chemically inert glass prevents leaching of any extractables into the mobile phase solvents
- Supplied with GL-45 screw thread
- Manufactured from 33 expansion, low extractable borosilicate glass conforming to USP Type I and ASTM E438, Type I, Class A requirements

Part Number	Capacity (mL)	Overall Height x Diameter (mm)	Case Qty
953932-0252	250	203 x 85	1
953932-0502	500	230 x 105	1
953932-1002	1000	275 x 130	1
953932-2002	2000	319 x 150	1
953932-5002	5000	373 x 205	1
953932-1003	10000	433 x 255	1
953932-2003	20000	578 x 315	1

### ULTRA-WARE® Three Hole Delivery Caps

- Caps have 1/4"-28 threads top and bottom with 1/8" ID holes to accept 1/8" OD PTFE tubing
- Body is PTFE
- Supplied complete with three 1/4"-28 CTFE plugs and a TFE/propylene o-ring.



Part Number	Screw Thread	Case Qty
953913-0000	GL 45	1

### Replacement Parts

Part Number	Description	Case Qty
953913-0001	ETFE Nut Plug 1/4"-28, Used to Seal Ports with Flat Bottom 1/4"-28 Threads	1
953903-0005	GL 45 Screw Cap	1



### ULTRA-WARE® Filtration Caps

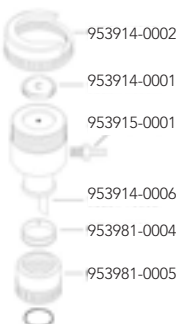
- Body is constructed of glass-filled PTFE with a vacuum adapter for 1/4" ID tubing
- Upper screw clamp holds a solvent pickup adapter or funnel
- 40-60 micron porosity fritted glass filter support is removable
- Supplied with a PTFE/propylene o-ring



Part Number	Filter Diameter (mm)	Screw Thread	Case Qty
953915-0047	47	GL 45	1

### Replacement Parts

Part Number	Description	Case Qty
953914-0002	47 mm Upper Screw Clamp	1
953914-0001	47 mm 40-60 micron Porosity Glass Support Frit	1
953915-0001	1/4" PFA Hose Barb	1
953914-0006	PTFE Drip Tip	1
953981-0004	Lower Cap Retainer Ring	1
953981-0005	GL 45 Lower Screw Cap	1



### ULTRA-WARE® Three Valve Delivery Caps

- Three on-off valves have 1/4"-28 threads top and bottom
- Valve body is PTFE
- Valve stem material is CTFE
- O-ring material for valve stem and lower seal is TFE/propylene



Part Number	Screw Thread	Case Qty
953903-0000	GL 45	1

### Replacement Parts

Part Number	Description	Case Qty
953903-0002	Blue Valve Handle	1
953903-0003	Red Valve Handle	1
953903-0004	Yellow Valve Handle	1
953903-0042	Short CTFE Valve Stem	1
953903-0005	GL 45 Screw Cap	1



### Accessories

Part Number	Description	Case Qty
953984-0090	ULTRA-WARE® Conversion Base for Caps	1
953906-0090	90 mm Standard Pickup Adapter	1
953906-0047	47 mm Standard Pickup Adapter	1



### ULTRA-WARE® Solvent Pickup Adapters

Designed to be used with the five valve, four valve and filtration caps to provide safe, in-line filtration that replaces the traditional pour-and-wait funnel filtration method.

- The unique Bevel-Seal™ makes a vacuum-tight o-ring connection to the PTFE tubing
- The HI-VAC® valve is easier to open under vacuum than the standard stopcock
- Closing the valve provides vacuum degassing after filtration
- Each unit is supplied with 3 feet (91 cm) of 1/4" OD FEP PTFE tubing
- 953906-6347 and 953906-6390 have FFKM o-rings and are THF-resistant
- Valve o-ring size is 010 and sidearm o-ring size is 108
- Manufactured from 33 expansion, low extractable borosilicate glass conforming to USP Type I and ASTM E438, Type I, Class A requirements.

Part Number	Diameter (mm)	THF Resistance	Case Qty
953906-0047	47	No	1
953906-6347	47	Yes	1
953906-0090	90	No	1
953906-6390	90	Yes	1

### Replacement Parts

Part Number	Description	Case Qty
953906-0002	47 mm Pickup Adapter Body	1
953906-0092	90 mm Pickup Adapter Body	1
953906-0001	Standard Valve Plug Assembly Blue Glass-Filled Nylon 15-415	1
410119-1508	Open-Top Compression Cap, Hole Diameter 8.5 mm	12



### ULTRA-WARE® Conversion Base

Converts the five valve, four valve and filtration caps to use 90 mm filter membranes, providing up to four times faster filtration.

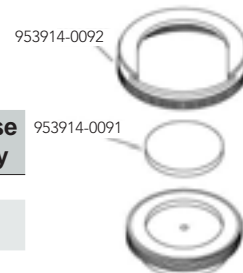
- The conversion base is manufactured from glass-filled PTFE and is supplied with a coarse porosity (40-60 micron porosity) glass support frit and an upper screw clamp
- Requires a 90 mm 953906 series solvent pickup adapter.



Part Number	Case Qty
953984-0090	1

### Replacement Parts

Part Number	Description	Case Qty
953914-0092	90 mm Upper Screw Clamp	1
953914-0091	90 mm 40-60 micron Porosity Glass Support Frit	1



### Accessories

Part Number	Description	Case Qty
953906-0090	90 mm Standard Pickup Adapter	1
953906-6390	90 mm THF-Resistant Pickup Adapter	1



# Safety System 3



Port for sparging line (optional use)

Port for solvent intake line

Filter  
Article No.  
953916-3002

Draws solvent from bottom of solvent bottle

Filters incoming sparging gas (optional use)

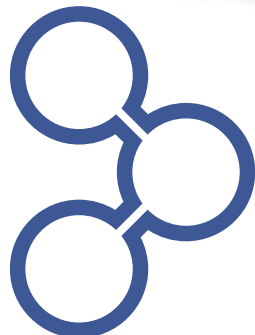
Safety System 3 is a unique Solvent Bottle Adapter that is made from PBT and converts ULTRAWARE® GL-45 mobile phase caps to standard 4L solvent bottles for direct connection to your HPLC pump. It is also available without the solvent bottle-to-GL-45 thread adapter.

- Eliminates the safety hazards of aluminum foil-wrapped solvent containers
- ULTRA-WARE® Economy Three Hole Cap is manufactured from PTFE with a TFE/propylene o-ring and a polypropylene screw collar
- Three connecting threads on top of the cap use standard 1/4"-28 flangeless fittings
- Two ports have 1/8" through-holes for connection to the inlet / sparge filter
- The third port has a 1/16" through-hole used as a vent port during sparging
- Included with your Safety System 3 is the unique Bottom-of-the-Bottle™ Inlet/ Sparge Filter.
- The filter combines the functions of an inlet filter with a sparger in a single, convenient device
- Sparging bubbles are prevented from entering the mobile phase stream while allowing the pump to draw all but a few milliliters of solvent from the reservoir or bottle
- All PEEK construction makes it ideal for virtually all mobile phases
- Supplied with 2 µm porosity frits and connections for 1/8" OD tubing.

Part Number	Description
953930-0000	Safety System 3 with GL-45 Bottle Adapter
953930-0001	Safety System 3 without GL-45 Bottle Adapter

Each Safety System 3 consists of the following:

953913-5000	1 ea. Economy 3-Hole Cap, GL-45
953907-0000	1 ea. Solvent Bottle Adapter, GL-45 (included with 953930-0000 only)
953916-3002	1 ea. Combination Inlet / Sparge Filter, 2 µm, PEEK™
420821-0018	2 ea. Flangeless Nut, ETFE, 1/4"-28 x 1/8"
420822-0018	2 ea. Flangeless Ferrule, ETFE, 1/8" (Optional)
953913-0001	1 ea. Vent Port Plug, ETFE, 1/4"-28
420823-0018	1 ea. Tubing, FEP PTFE, 1/8" OD x 1/16" ID x 10'



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