

Vials, Caps and Seals



This section includes the full range of Chromacol's vials, caps, seals crimping tools, decappers and storage racks plus information regarding compatibility.

We offer custom manufactured capabilities to meet all of your vial requirements.



Chromacol Glass Specifications

PROPERTY	GOLD GRADE	NEUTRAL TYPE I
Working Point	1255°C	1140°C
Strain Point	513°C	530°C
Annealing Point	565°C	570°C
Softening Point	827°C	785°C
Linear Coefficient of Expansion (from 0 to 300°C), in./in./°C	32×10 ⁻⁷	55×10 ⁻⁷
Density grams per mL	2.22	2.33
Refractive Index—Sodium D line (.5893 microns)	1.47	1.49
Visible Light Transmission, 2 mm thickness	92%	91%
Specific Heat (in g. cal. per g. deg.) (25 to 175°C) (25 to 175°C)	0.204	0.204
Thermal Conductivity (in cal/cm/cm ² /sec/°C)	0.0027	0.0026

- Working Point — the temperature at which glass has a viscosity of 10⁴ poises. At this temperature, glass is soft enough for most working or sealing operations.
- Softening Point — the temperature at which glass has a viscosity of 10^{7.6} poises. In this temperature range glass will deform noticeably under its own weight: ASTM C 338.
- Annealing Point — the temperature at which the internal stress caused by rapid cooling from lampworking or forming temperatures may be substantially removed in a matter of minutes. It is determined by measuring the elongation rate versus temperature of a fiber of glass under conditions prescribed by ASTM Designation C 336. The values given here are typical for production glasses.

Typical Glass Composition

Different glass types contain different proportions of oxides to give characteristics such as colour and different expansion coefficients.

Oxide by %

Glass Type	SiO ₂	B ₂ O ₃	TiO ₂	K ₂ O	Al ₂ O ₃	Fe ₂ O ₃	Na ₂ O	BaO	CaO	MgO
Soda Glass	69	1		3	4		13	2	5	3
Borosilicate-Clear	75	10.5			5		7	1	1.5	
Borosilicate-Amber	70	7	5	1	6	1	7	2	1	
Borosilicate-Gold Grade	80.6	13			2.3		4			

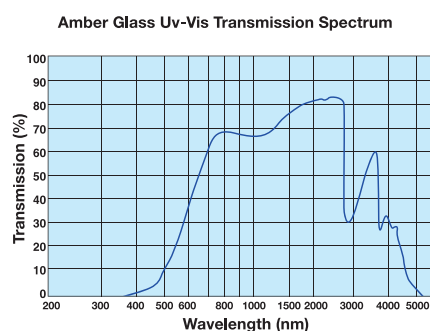
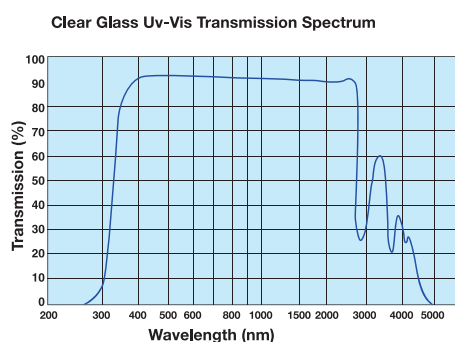
Hydrolytic Extraction

Chromacol autosampler vials are manufactured from glass meeting the international standards for hydrolytic extraction.

- BS ISO 3585, DIN 12217 borosilicate glass
- ASTM E-438 Type I class A borosilicate glass
- US Pharmacopoeia Type I borosilicate glass
- European Pharmacopoeia Type I glass

Light Transmission

The choice of clear or amber glass may also be made in order to deal with the exposure of sample to incident UV-Vis light.



Snap Cap Vials and Caps

Chromacol's snap cap vial, the 2-RV, uses a polyethylene (PE) cap with a pre-fitted seal that needs only light pressure to close and seal onto the dual concentric rings around the rim of the vial.

No tools are needed to seal or unseal these vials and the caps may be easily removed to recover a precious sample or for safe disposal.

The 2-RV has a large target area which makes it much safer for the autosampler needle and features a ceramic write on patch for sample identification.

These vials, compatible with all robotic autosamplers, can be used with many of Chromacol's clean, rubber and silicone 11mm seals. This means that a cap and seal combination can be found for almost any solvent used in chromatography.



Key to products ■ Vial ■ Cap

PART NUMBER	DESCRIPTION	Vials	SIZE	PACK SIZE
■ 2-RV	2mL snap cap vial in clear glass, with write-on patch.		12 x 32mm	500
■ 2-RV(A)	2mL snap cap vial in amber glass, with write-on patch.		12 x 32mm	500
■ 1.5-HRRV	1.5mL High Recovery snap cap vial – clear.		12 x 32mm	100
■ 1.5-HRRV(S)	1.5mL High Recovery snap cap vial – clear - silanised.		12 x 32mm	100
■ 03-FIRV	300µL fused insert snap cap vial – clear.		12 x 32mm	500
■ 03-FIRV(A)	300µL fused insert snap cap vial – amber.		12 x 32mm	500

PART NUMBER	DESCRIPTION	11mm Snap Caps	PACK SIZE
■ 11-PSN-8RT1	11mm PE snap cap pre-fitted with a red rubber/PTFE seal - black.		500
■ 11-PSN-ST1	11mm PE snap cap pre-fitted with a silicone/PTFE seal - black.		500
■ 11-PSN(B)	11mm PE snap cap with an integral PE seal - blue.		500
■ 11-PSN(B)-T02	11mm PE snap cap pre-fitted with a PTFE seal - blue.		500
■ 11-PSN(B)-TST1	11mm PE snap cap pre-fitted with a PTFE/silicone/PTFE seal - blue.		500
■ 11-PSN(B)-8RT1	11mm PE snap cap pre-fitted with a red rubber/PTFE seal - blue.		500
■ 11-PSN(B)-ST1	11mm PE snap cap pre-fitted with a silicone/PTFE seal - blue.		500
■ 11-PSN(B)-ST101	11mm PE snap cap pre-fitted with a blue silicone/PTFE seal - blue.		500
■ 11-PSN(B)-ST1X	11mm PE snap cap pre-slit PTFE/silicone seal - blue.		500
■ 11-PSN(G)-ST1X	11mm PE snap cap pre-slit PTFE/silicone seal - green.		500
■ 11-PSN(R)-T02	11mm PE snap cap pre-fitted with a PTFE seal - red.		500
■ 11-PSN(Y)-8RT1	11mm PE snap cap pre-fitted with a red rubber/PTFE seal -yellow.		500
■ 11-PSN(Y)-ST1	11mm PE snap cap pre-fitted with a silicone/PTFE seal - yellow.		500

2-RV



2-RV(A)



1.5-HRRV



03-FIRV



03-FIRV(A)



Microsampling Using Micro+

Chromacol Micro+ vials suited to microsampling, trace analysis, environmental work and clinical investigations. They provide a very convenient way for analysts to work with small samples, e.g. down to 4µL, allowing for faster sample preparation with a consequential reduction in analysis costs.



09-FIV



09-FISV



03-FIV



03-FIV(A)



03-FISV



03-FISV(A)



03-FIRV

Our precision manufacturing process reassures an accurate positioning of the taper, which is fused to the base.

The write-on ceramic label ensures an accurate storage and retrieval.

Micro+ vials are compatible with autosamplers that use standard 2mL, 12 x 32mm vials.



03-FIRV(A)

Key to products ■ Vial

PART NUMBER	DESCRIPTION	Micro+	SIZE	PACK SIZE
09-FIV	900µL crimp top, fused insert vial, clear.		12 x 32mm	500
09-FISV	900µL screw top, fused insert vial, clear.		12 x 32mm	500
03-FIV	300µL glass insert, fused into a 2mL crimp top vial.		12 x 32mm	500
03-FIV(A)	300µL glass insert, fused into an amber 2mL crimp top vial.		12 x 32mm	500
03-FISV	300µL glass insert, fused into a 2mL screw top vial.		12 x 32mm	500
03-FISV(A)	300µL glass insert, fused into an amber 2mL screw top vial.		12 x 32mm	500
03-FIRV	300µL fused insert snap cap vial – clear.		12 x 32mm	500
03-FIRV(A)	300µL fused insert snap cap vial – amber.		12 x 32mm	500

Accessories and notes

All of these vials use standard caps and accessories that are normally used with either 12 x 32mm crimp top vials (see page 32), 12 x 32mm screw top vials (see page 36), or 12 x 32mm snap cap vials (see page 25).

Microsampling Using Glass Inserts

Key to products ■ Vial ■ Accessory

PART NUMBER	DESCRIPTION	Microsampling	SIZE	PACK SIZE
■ 03-MTV	300µL tapered insert for 2.5-CV vials.		5 x 38mm	1000
■ 03-NV	300µL flat bottomed insert for wide necked 2mL vials.		6 x 31mm	1000
■ 02-MTVMP	200µL tapered insert for narrow necked vials – mandrel point.		5 x 30mm	500
■ 02-MTVWG	200µL tapered insert for wide necked 2mL vials, Gold grade glass.		6 x 30mm	1000
■ 02-MTV	200µL tapered insert for narrow necked 2mL vials.		5 x 30mm	1000
■ 02-NV	200µL flat bottomed insert for narrow necked 2mL vials.		5 x 31mm	1000

PART NUMBER	DESCRIPTION	Accessory	PACK SIZE
■ MTS-I	Polyethylene support for tapered glass inserts.		500

ADDITIONAL NOTES

The 02-MTVWG, 02-MTVMP and 02-MTV require the use of the MTS-I spring support.



Residual Volumes

The ability of an autosampler to extract the last few microlitres from these vials is dependent on the bottom profile. The best recovery is from a tapered insert or high recovery base. The values given are for conical needles with positioning within 2mm or 1mm of the vial base. For side-entry needles the volumes will be slightly higher. Recovery will also be affected by the solvent viscosity and syringe draw capacity.

VIAL TYPE	PRODUCT CODE	RESIDUAL VOLUMES 2mm FROM BASE	RESIDUAL VOLUMES 1mm FROM BASE
2mL flat base	2-CV	157.1 µL	78.6 µL
Round bottomed	1.1-CRV	14.1 µL	7.1 µL
300µL fused insert	03-FIV	1.6 µL	0.8 µL
1.5mL High Recovery	1.5-HRCV	3.5 µL	1.8 µL
200µL SCI-VI™	02-CTVG	0.4 µL	0.2 µL
900µL fused insert	09-FIV	1.6 µL	0.8 µL
Conical tapered insert	02-MTVWG	0.9 µL	0.4 µL

Mandrel Point Inserts

Where extraction of the last few microlitres of sample is critical then an internal mandrel point insert should be used. The mandrel point gives a controlled inner profile that allows the extraction needle to consistently reach the last few microlitres of sample.

Microsampling - Sci-Vi System

PART NUMBER	SIZE	DESCRIPTION
SV-S1	12 x 29mm	Designed to replace standard 12 x 32mm vials. Suitable for most autosamplers.
SV-S2	8 x 27mm	Designed to replace 8 x 30mm vials (08-CV).
SV-S3A	12 x 31mm	Designed to replace standard 12 x 32mm vials. Similar to the SV-S1, but with a solid base.
SV-S4	12 x 32mm	Designed to be used in the Agilent 1090A. This can also be used in most autosamplers to protect light sensitive materials.
SV-S1 IA	12 x 33mm	Specially designed to replace standard 12 x 32mm vials in robotic autosamplers. May also be used in most autosamplers.
SV-S1 IG	12 x 33mm	Glass version of the SV-S1 IA. Specially designed to replace standard 12 x 32mm vials in robotic autosamplers. May also be used in most autosamplers. Comes with a T-25 tray.
SV-S12A	23 x 13mm	Replaces 12 x 32mm screw top vials with flanged caps, when used in Shimadzu and Jasco instruments.
SV-S14	12 x 33mm	Designed to replace a standard 12 x 32mm vial. Suitable for most autosamplers. This has a longer neck than the SV-S1 IA, and is ideal for the Agilent 7673A.
SV-CE	12 x 40mm	Designed to replace the 2.5-CV (12 x 40mm vial) on the Thermo Scientific AS 800 (CE and Fisons).
SV-TSP	12 x 34mm	Designed to replace a standard 12 x 32mm vial on Thermo Scientific instruments.
SV-S15	15 x 45mm	Designed to replace a standard 15 x 46mm 4mL vial in Waters Wisp, and any other instrument that uses 4mL vials.

ADDITIONAL NOTES

- All of the Sci-Vi system sleeves are made from PTFE apart from the SV-S4, SV-S15 and SV-S1 IG, which are made from black polyethylene, polyethylene and glass respectively.
- The Sci-Vi system may now be used with our low cost polyethylene snap cap 8-PECL1 and 8-PECLX. In some cases the skirt of the 8-PECL1 and 8-PECLX is widened as it grips the vial so it may not fit the SV-S3A, SV-S1 IA, SV-S1 IG and SV-S12A sleeves which have a cap recess. However, they are compatible with the SV-TSP.
- Sci-Vi system sleeves should not be used with the Spectra-Physics heater module.
- The SV-S2 requires the use of an S-06 spring when used in the Waters 96 vial tray.
- The Fisons AS 800 requires the additional use of a support sleeve, reference number PWS-11. See page 78.
- The PE ISS-200/Series 200, Gilson™, Kontron™, Merck/Hitachi, Jasco and CMA all have carousels or trays which allow the use of the vials from the Sci-Vi system to be used without the need for a support sleeve.
- SV-S4 can be used for additional light protection.



Microsampling - Sci-Vi System

Key to products ■ Vial ■ Cap ■ Plug ■ Accessory

PART NUMBER	DESCRIPTION	Vials	SIZE	PACK SIZE
■ 03-CVG	300µL Sci-Vi crimp top vial, round bottomed, Gold grade glass.		6 x 32 mm	500
■ 02-CTV(A)	200µL Sci-Vi crimp top vial, tapered, amber glass.		6 x 32 mm	500
■ 02-CTVG	200µL Sci-Vi crimp top vial, tapered, Gold grade glass.		6 x 32 mm	500
■ 01-CVG	100µL Sci-Vi crimp top vial, round bottomed, Gold grade glass.		6 x 32 mm	500

PART NUMBER	DESCRIPTION	8mm Crimp Caps	SPECIAL NOTE	PACK SIZE
■ 8-AC6	Cap with type 6 natural rubber/PTFE seal.		Sulphur free, ideal for ECD.	1000
■ 8-AC6(B)	Blue cap with type 6 natural rubber/PTFE seal.		Sulphur free, ideal for ECD.	1000
■ 8-AC6(R)	Red cap with type 6 natural rubber/PTFE seal.		Sulphur free, ideal for ECD.	1000
■ 8-AC7	Cap with type 7 natural rubber/PTFE seal.		Standard, suitable for Agilent.	1000
■ 8-ACB	Blank cap - no seal.			1000
■ 8-AC-CBT1	Cap with grey chlorobutyl/PTFE seal.		For long term storage.	500
■ 8-AC(B)-ST144	Blue cap with blue silicone/red PTFE seal.		Preferred for Fisons.	500
■ 8-AC-ST15	Cap with white silicone/red PTFE seal.		Preferred for ICI and Pharmacia.	500
■ 8-AC-ST101	Cap with blue silicone/PTFE seal.		Preferred for Fisons and Thermo Scientific. Good for ECD.	500
■ 8-AC-ST101X	Cap with blue silicone/PTFE seal.		Pre-cut, for PerkinElmer ISS-200, Merck-Hitachi.	500
■ 8-ACT	Cap with PTFE seal.		Suitable for PerkinElmer ISS-100.	1000
■ 8-AC-TST1	Cap with red PTFE/white silicone/red PTFE seal.		Anti-coring, preferred for Gilson.	500
■ 8-AC-V1	Cap with Viton™ seal.		Good for ECD.	500

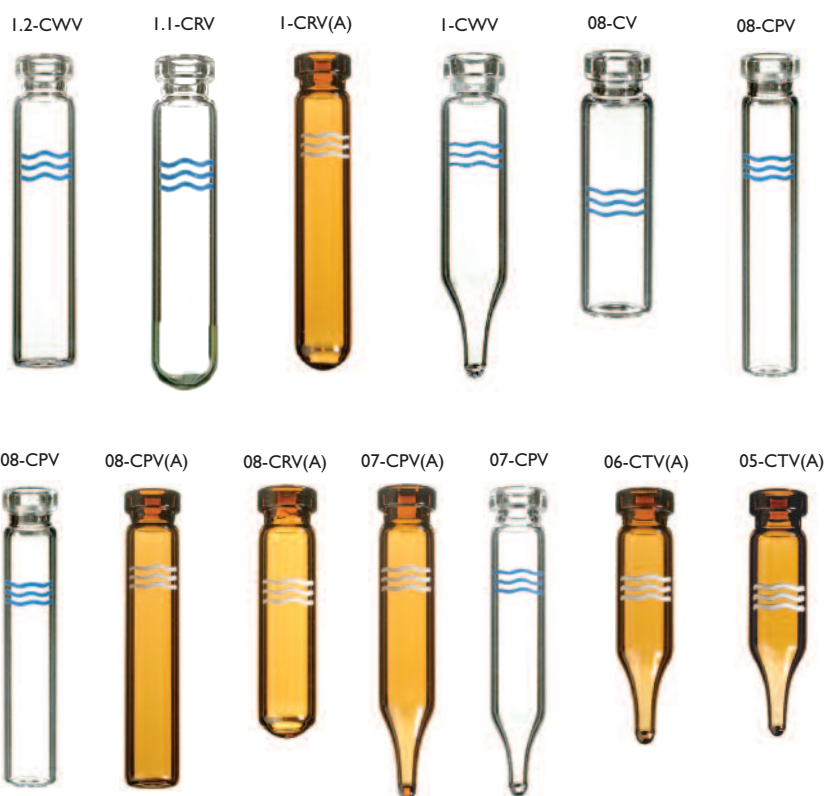
PART NUMBER	DESCRIPTION	Plugs and Snap Caps	SPECIAL NOTE	PACK SIZE
■ 8-PEPI	8mm polyethylene plug.			1000
■ 8-PECI	8mm polyethylene snap cap.			1000
■ 8-PECIX	8mm polyethylene snap cap.		Pre-cut, suitable for PerkinElmer (LC).	1000
■ 8-PEC-STI	8mm snap cap with a silicone/PTFE seal.			1000

PART NUMBER	DESCRIPTION	Accessories	PACK SIZE
■ CMS-0	Crimpmate bench-top crimp station, no jaws.		1
■ CMSP-0	Pneumatic Autocrimp™ benchtop crimp station, no jaws.		1
■ CMS-8	Crimpmate benchtop crimp station with 8mm jaw.		1
■ CMJ-8	Crimpmate benchtop crimp station jaw for 8mm crimp caps.		1
■ CDJ-8	Crimpmate benchtop crimp station de-capping jaw for 8mm crimp caps.		1
■ CR-8	Hand crimper for 8mm crimp caps.		1
■ DCR-8	De-capper for 8mm crimp caps - pliers type.		1
■ DCB-8	De-capper for 8mm crimp caps - hand crimper type.		1
■ T-200	Foam tray - 200 vial capacity for vials with 8mm o.d.		5
■ T-15/302	Hard tray - 15 vial capacity for vials with both 6mm and 8mm o.d.		1
■ T-104	Aluminium tray - 104 vials capacity for vials with 11mm o.d.		5
■ T-105	Foam tray - 105 vial capacity for vials with 11mm o.d.		5
■ T-25	Aluminium tray - 25 vials capacity for vials with 11mm o.d.		1

Vials Using 8mm Crimp Caps

Key to products ■ Vial ■ Cap ■ Plug ■ Accessory

PART NUMBER	DESCRIPTION	Vials Using 8mm Crimp Caps	SIZE	PACK SIZE
I.2-CWV	1.2 mL crimp top vial - clear - for Waters.		8 x 40 mm	500
I.1-CRV	1.1 mL crimp top round bottom vial - clear for 96 square deep well plates.		7 x 42 mm	500
I-CRV(A)	1 mL crimp top round bottom vial - amber.		7 x 40 mm	500
I-CWV	1 mL crimp top tapered vial - clear - for Waters.		8 x 40 mm	500
08-CV	800µL crimp top vial - clear.		8 x 30 mm	500
08-CPV(A)	800µL crimp top vial - amber.		7 x 40 mm	500
08-CPV	800µL crimp top vial - clear.		7 x 40 mm	500
08-CRV(A)	800µL crimp top round bottom vial - amber.		7 x 32 mm	500
07-CPV(A)	700µL crimp top tapered vial - amber.		7 x 40 mm	500
07-CPV	700µL crimp top tapered vial - clear.		7 x 40 mm	500
06-CTV(A)	600µL crimp top tapered vial - amber.		7 x 32 mm	500
05-CTV(A)	500µL crimp top tapered vial - amber.		7 x 30 mm	500



ADDITIONAL NOTES

- The I.2-CWV and I-CWV may require a Fisons polyethylene support when used in the AS 800.
- The 07-CPV(A) and 07-CPV are used by some Waters' customers as limited volume inserts in the 4mL vial, where an S-15 spring is used.
- The 07-CPV(A) and 07-CPV can also be used in DuPont™ autosamplers in the 5mL vial (5-SV) where an S-40 spring is used.
- The 06-CTV(A) and 08-CTV(A) require the use of the WS-5 support sleeve. Any autosampler which uses the SV-S11A/SV-S11IG may use these vials.
- The preferred type of closures for the HP 1050A are the 8-AC-TST1 or 8-PEC1.
- The I.1-CRV vial requires the use of a 96 well titer plate reference number I.1-MTPS-96

Vials Using 8mm Crimp Caps

PART NUMBER	DESCRIPTION	8mm Crimp Caps	SPECIAL NOTE	PACK SIZE
8-AC6	Cap with type 6 natural rubber/PTFE seal.		Sulphur free, ideal for ECD.	1000
8-AC6(B)	Blue cap with type 6 natural rubber/PTFE seal.		Sulphur free, ideal for ECD.	1000
8-AC6(R)	Red cap with type 6 natural rubber/PTFE seal.		Sulphur free, ideal for ECD.	1000
8-AC7	Cap with type 7 natural rubber/PTFE seal.		Standard, suitable for Agilent.	1000
8-ACB	Blank cap - with hole.			1000
8-AC-CBT I	Cap with grey chlorobutyl/PTFE seal.		For long term storage.	500
8-AC(B)-ST144	Blue cap with blue silicone/red PTFE seal.		Preferred for Fisons.	500
8-AC-ST15	Cap with white silicone/red PTFE seal.		Preferred for ICI and Pharmacia.	500
8-AC-ST101	Cap with blue silicone/PTFE seal.		Preferred for Fisons and Thermo Scientific. Good for ECD.	500
8-AC-ST101X	Cap with blue silicone/PTFE seal.		Pre-cut, for PerkinElmer ISS-200, Merck-Hitachi.	500
8-ACT	Cap with PTFE seal.		Suitable for PerkinElmer ISS-100.	1000
8-AC-TST I	Cap with red PTFE/white silicone/red PTFE seal.		Anti-coring, preferred for Gilson.	500
8-AC-VI	Cap with viton seal.		Good for ECD.	500

PART NUMBER	DESCRIPTION	Plastic Caps and Plugs	SPECIAL NOTE	PACK SIZE
8-PEP I	8mm polyethylene plug.			1000
8-PEC I	8mm polyethylene snap cap.			1000
8-PEC IX	8mm polyethylene snap cap.		Pre-cut, suitable for PerkinElmer (LC).	1000
8-PEC-ST I	8mm snap cap with a silicone/PTFE seal.			1000

PART NUMBER	DESCRIPTION	Accessories	PACK SIZE
CMS-0	Crimpmate™ bench-top crimp station, no jaws.		1
CMSP-0	Pneumatic Autocrimp benchtop crimp station, no jaws.		1
CMS-8	Crimpmate benchtop crimp station with 8mm jaw.		1
CMJ-8	Crimpmate benchtop crimp station jaw for 8mm crimp caps.		1
CDJ-8	Crimpmate benchtop crimp station de-capping jaw for 8mm crimp caps.		1
CR-8	Hand crimper for 8mm crimp caps.		1
DCR-8	De-capper for 8mm crimp caps - pliers type.		1
DCB-8	De-capper for 8mm crimp caps - hand crimper type.		1
T-200	Foam tray-200 vial capacity for vials with 8mm o.d.		5
T-15/302	Hard tray-15 vial capacity for vials with both 6mm and 8mm o.d.		1
T-162	Aluminium tray-162 vial capacity for vials with 9mm o.d.		5

Vials Using 11mm Crimp Caps



Key to products ■ Vial ■ Cap ■ Seal ■ Plug ■ Accessory

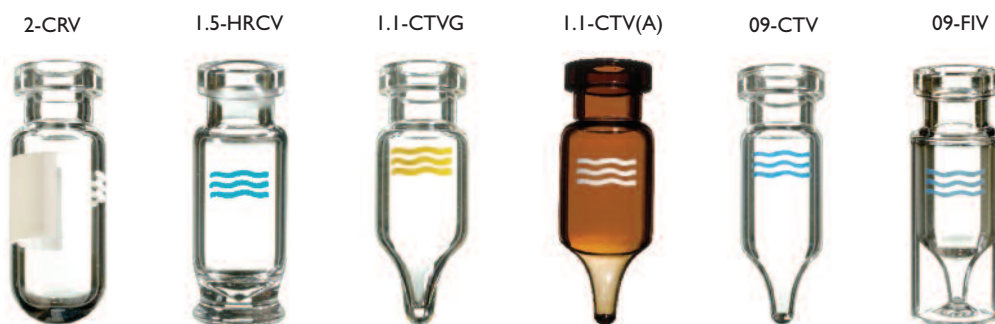


PART NUMBER	DESCRIPTION	Vials Using 11mm Crimp Caps	SIZE	PACK SIZE
4-CV	4mL crimp top vial - clear.		15 x 46 mm	500
2.5-CV	2.5mL crimp top vial - clear.		12 x 40 mm	500
2-CV	2mL crimp top vial - clear wide mouth with write on patch.		12 x 32 mm	500
2-CV(A)	2mL crimp top vial - amber wide mouth with write on patch.		12 x 32 mm	500
2-CVG	2mL crimp top vial - clear gold grade - with write on patch.		12 x 32 mm	500
2-CRV	2mL round bottom vial with write on patch - clear.		12 x 32 mm	500
1.5-HRCV	1.5mL crimp top vial - clear - High Recovery.		12 x 32 mm	100
1.1-CTVG	1.1mL crimp top tapered vial - clear.		12 x 32 mm	500
1.1-CTV(A)	1.1mL crimp top tapered vial - amber.		12 x 32 mm	500
09-CTV	900µL crimp top tapered vial - clear.		10 x 32 mm	500
09-FIV	900µL crimp top fused insert vial - clear.		12 x 32 mm	500
07-HRPMPCV	700µL PMP crimp vial - High Recovery.		12 x 32mm	100
06-PECV	600µL polyethylene crimp top vial.		12 x 32 mm	500
06-PPCV	600µL polypropylene crimp top vial.		12 x 32 mm	500
03-FIV	300µL crimp top fused insert vial - clear with write on patch.		12 x 32 mm	500
03-FIV(A)	300µL crimp top fused insert vial-amber with write on patch.		12 x 32 mm	500
03-PECV	300µL polyethylene crimp top vial.		12 x 30 mm	500

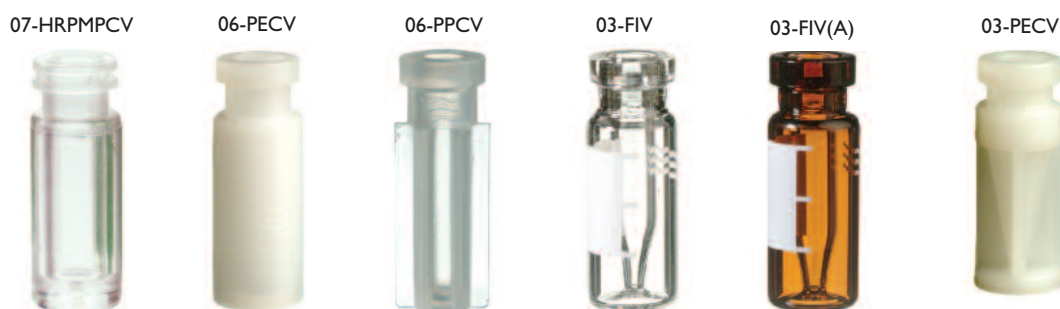
A range of PTFE vials is also available. See page 39.

PART NUMBER	DESCRIPTION	11mm Crimp Caps	SPECIAL NOTE	PACK SIZE
11-AC6	Cap with type 6 natural rubber/PTFE seal.		Sulphur free, ideal for ECD.	500
11-AC6(B)	Blue cap with type 6 natural rubber/PTFE seal.		Sulphur free, ideal for ECD.	500
11-AC6(G)	Green cap with type 6 natural rubber/PTFE seal.		Sulphur free, ideal for ECD.	500
11-AC6(GO)	Gold cap with type 6 natural rubber/PTFE seal.		Sulphur free, ideal for ECD.	500
11-AC6(R)	Red cap with type 6 natural rubber/PTFE seal.		Sulphur free, ideal for ECD.	500
11-AC7	Cap with type 7 natural rubber/PTFE seal.		Standard, suitable for Agilent.	500
11-AC7(B)	Blue cap with type 7 natural rubber/PTFE seal.		Standard, suitable for Agilent.	500
11-AC7(G)	Green cap with type 7 natural rubber/PTFE seal.		Standard, suitable for Agilent.	500
11-AC7(GO)	Gold cap with type 7 natural rubber/PTFE seal.		Standard, suitable for Agilent.	500
11-AC7(R)	Red cap with type 7 natural rubber/PTFE seal.		Standard, suitable for Agilent.	500
11-ACB	Blank cap - with hole.		For use with the 11-LLX.	500
11-LLX	Blue silicone/PTFE seal.		For use with liquid liquid extraction.	100
11-AC-CBT1	Cap with grey chlorobutyl/PTFE seal.		For long term storage.	500
11-AC-PP	Cap with polypropylene seal.		Suitable for PerkinElmer(LC).	500
11-AC(B)-ST144	Blue cap with blue silicone/red PTFE seal.		Preferred for Fisons.	500
11-AC-ST15	Cap with white silicone/red PTFE seal.		Preferred for ICI and Pharmacia.	500
11-AC-ST101	Cap with blue silicone/PTFE seal.		For Fisons, Shimadzu and Thermo Scientific. Good for ECD.	500
11-AC-ST101X	Cap with blue silicone/PTFE seal.		Pre-cut, for PerkinElmer ISS-200, Merck-Hitachi.	500
11-ACT	Cap with PTFE seal.		Suitable for PerkinElmer ISS-100.	1000
11-AC-TST1	Cap with red PTFE/white silicone/red PTFE seal.		Anti-coring, preferred for Gilson.	500
11-AC-VI	Cap with Viton seal.		Good for ECD.	500
11-MC-8RT1	Cap with type 8 natural rubber/PTFE seal.		Magnetic, suitable for CTC/Leap.	500
11-MC-ST101	Cap with blue silicone/PTFE seal.		Magnetic, suitable for CTC/Leap.	500
11-MC-ST15	Cap with white silicone/red PTFE seal.		Magnetic, suitable for CTC/Leap.	500

Vials Using 11mm Crimp Caps



PART NUMBER	DESCRIPTION	Plastic Caps and Plugs	SPECIAL NOTE	PACK SIZE
11-PEP2(B)	11mm black polyethylene plug.		For Varian autosamplers.	1000
11-PEP2W	11mm polyethylene plug for wide necked vials.			1000
11-PEPC3X	11mm polyethylene snap cap plug for narrow necked vials.		Anti vacuum generation, pre-cut.	1000
11-PEPC3XW	11mm snap cap plug for wide necked vials.		Anti vacuum generation, pre-cut.	1000
11-PEC1	11mm polyethylene snap cap.		Ideal for single injections.	1000
11-PEC1X	11mm polyethylene snap cap.		Pre-cut, suitable for PerkinElmer (LC).	1000
11-PEC-8RT1	11mm snap cap, rubber/PTFE seal.		General purpose, does not require a crimper.	1000
11-PEC-ST1	11mm snap cap, white silicone/red PTFE seal.		General purpose, does not require a crimper.	1000



PART NUMBER	DESCRIPTION	Accessories	PACK SIZE
PWS-11	Plastic support sleeve for 1.1-CTVG/1.1-STVG in AS 800.		100
RTS-1	Rubber support sleeve for 1.1-CTVG.		500
TTS-312	PTFE support sleeve for 1.1-CTVG.		50
TTS-313	PTFE support sleeve for use with 1.1-CTVG with HP autosamplers except 7673 I/II.		50
TTS-314	PTFE support sleeve with solid base for use with 1.1-CTVG with Varian autosamplers.		50
WS-6	Plastic support sleeve for the 09-CTV.		100
CMS-0	Crimpmate benchtop crimp station, no jaws.		1
CMSP-0	Pneumatic Autocrimp benchtop crimp station, no jaws.		1
CMS-11	Crimpmate benchtop crimp station with 11mm jaw.		1
CMJ-11	Crimpmate benchtop crimp station jaw for 11mm crimp caps.		1
CDJ-11	Crimpmate benchtop crimp station de-capping jaw for 11mm crimp caps.		1
CR-11	Hand crimper for 11mm crimp caps.		1
DCR-11	De-capper for 11mm crimp caps - pliers type.		1
DCB-11	De-capper for 11mm crimp caps - hand crimper type.		1
ECR-11	11mm electronic hand-held crimper.		1
EDCB-11	11mm electronic hand-held decappers.		1
LP-1	Labelling pen for writing on vials with 'write-on' patches.		1
T-105	Foam tray-105 vial capacity for vials with 12mm o.d.		5
T-15/308	Hard tray-15 vial capacity for vials with both 6mm and 12mm o.d.		1
T-25	Aluminium tray-25 vial capacity for vials with 12mm o.d.		1
T-104	Aluminium tray-104 vial capacity for vials with 12mm o.d.		5
B-100	Plastic storage trays with lids for 2mL vials, assorted colours.		5

ADDITIONAL NOTES

- Due to lack of lateral support in some carousels, support sleeves may be required for 1.1-CTVG. See page 78.
- 11-PEPC3X and 11-PEPC3XW are not suitable for Spectra-Physics.
- In order to use a 1.1-CTVG in the Fisons AS 800, a TTS-312 and a PWS-11 must be used.
- The 09-CTV must be used with a WS-6 support. See page 78.
- The 06-PECV/06-PPCV have an internal rounded bottom and are suitable for microsampling work.

Vials Using 8mm Screw Caps

Key to products ■ Vial ■ Cap ■ Seal ■ Plug ■ Accessory

PART NUMBER	DESCRIPTION	Vials Using 8mm Screw Caps	SIZE	PACK SIZE
2-SV	2mL screw top vial with write on patch - clear.		12 x 32 mm	500
2-SV(A)	2mL screw top vial with write on patch - amber.		12 x 32 mm	500
2-SVG	2mL screw top vial with write on patch - clear gold grade.		12 x 32 mm	500
1.1-STVG	1.1mL screw top tapered vial - clear gold grade.		12 x 32 mm	500
06-PESV	600µL polyethylene screw top vial.		12 x 32 mm	500
06-PPSV	600µL polypropylene screw top vial.		12 x 32 mm	500
03-PPSV	300µL polypropylene screw top vial.		12 x 32 mm	500

PART NUMBER	DESCRIPTION	8mm Screw Caps	SPECIAL NOTE	PACK SIZE
8-SC-8RT1	Cap with rubber/PTFE seal.		General purpose.	500
8-SC-ST15	Cap with white silicone/red PTFE seal.			500
8-SC	Black cap.			500
8-SC(B)	Blue cap for Agilent.		Screw cap for Agilent 7673 with 2-SV vials.	500
8-SC(BT)	Blue cap.			500
8-SC(R)	Red cap.			500
8-SC(W)	White cap.			500
8-SC(Y)	Yellow cap.			500
8-SCJ	Black cap with wider flange.		For Jasco, Hitachi and Shimadzu.	500
8-SCJ(R)	Red cap with wider flange.		For Jasco, Hitachi and Shimadzu.	500
8-SCJ(W)	White cap with wider flange.		For Jasco, Hitachi and Shimadzu.	500
8-SCJ(Y)	Yellow cap with wider flange.		For Jasco, Hitachi and Shimadzu.	500
8-SCS	Black solid cap, no central hole.		For long term storage and general purpose.	500

PART NUMBER	DESCRIPTION	8mm Seals	SPECIAL NOTE	PACK SIZE
8-6RT1	Type 6 natural rubber/PTFE seal.			1000
8-ST15	Red silicone/white PTFE seal.		Standard.	500
8-ST14	Blue silicone/PTFE seal.			500
8-ST14X	Blue silicone/PTFE seal, pre-cut.		Anti vacuum generation.	500
8-ST143	White silicone/PTFE seal.		Extremely soft, suitable for Shimadzu.	500
8-ST101	Blue silicone/PTFE seal.		Good for ECD.	500
8-TST11	PTFE/blue silicone/PTFE seal.			500
8-TST1	Red PTFE/white silicone/red PTFE seal.			500
8-T02	PTFE seal.			1000

PART NUMBER	DESCRIPTION	Plugs	SPECIAL NOTE	PACK SIZE
8-SCP	8mm polyethylene snap cap plug.		Push fit screw cap.	500
11-PEP2(B)	11mm black polyethylene plug.		For Varian autosamplers with I.R. detectors.	1000



Vials Using 8mm Screw Caps

PART NUMBER	DESCRIPTION	Accessories	PACK SIZE
PWS-11	Plastic support sleeve for use in the Fisons AS 800 autosampler.		100
RTS-1	Rubber support sleeve for I.I-STVG.		500
TTS-312	PTFE support sleeve for I.I-STVG.		50
TTS-313	PTFE support sleeve for use with I.I-STVG with Agilent autosamplers except 7673 I/II.		50
TTS-314	PTFE support sleeve with blank base for use with I.I-STVG with Varian.		50
T-105	Foam tray-105 vial capacity for vials with 12mm o.d.		5
T-15/308	Hard tray-15 vial capacity for vials with both 6mm and 12mm o.d.		1
T-25	Aluminium tray-25 vial capacity for vials with 12mm o.d.		1
T-104	Aluminium tray-104 vial capacity for vials with 12mm o.d.		5
B-100	Plastic storage trays with lids for 2mL vials, assorted colours.		5

ADDITIONAL NOTES

- Customers using the PerkinElmer AutoSystem, Spectra-Physics/Thermo Scientific or Varian should use the following caps: 8-SC, 8-SC(BT), 8-SC(R), 8-SC-(W) or 8-SC(Y).
- The 8-SCP is not compatible with Shimadzu, Spectra-Physics/Thermo Scientific or Varian.

2-SVG



2-SV



2-SV(A)



I.I-STVG



06-PESV



06-PPSV



03-PPSV



All of these vials are narrow necked



Vials Using 9 and 11mm Screw Caps

Key to products ■ Vial ■ Cap ■ Seal ■ Accessory

PART NUMBER	DESCRIPTION	Vials	SIZE	PACK SIZE
4-SVQ	4mL screw top vial - clear - For Thermo Scientific.		15 x 46mm	500
2-DV	2mL Double Top™ vial - clear – uses 11mm screw caps.		12 x 32mm	500
2-DV(A)	2mL Double Top vial - amber – uses 11mm screw caps.		12 x 32mm	500
2-SVW	2mL screw top vial with write-on patch – clear.		12 x 32mm	500
2-SVW(A)	2mL screw top vial with write-on patch – amber.		12 x 32mm	500
1.5-HRSV	1.5mL High Recovery screw top vial – clear.		12 x 32mm	100
1.5-HRSV(S)	1.5mL High Recovery screw top vial – clear - silanised.		12 x 32mm	100
1.5-HRSV(A)	1.5mL High Recovery screw top vial – amber.		12 x 32mm	100
1.5-HRSV(A)S	1.5mL High Recovery screw top vial – amber - silanised.		12 x 32mm	100
09-FISV	900µL fused insert screw top vial – clear.		12 x 32mm	500
03-FISV	300µL fused insert screw top vial – clear.		12 x 32mm	500
03-FISV(A)	300µL fused insert screw top vial – amber.		12 x 32mm	500
03-PPSVW	300µL polypropylene screw top vial.		12 x 32mm	500

PART NUMBER	DESCRIPTION	Screw Caps and Seals for 2-DV and 2-DV(A)	PACK SIZE
11-DSC(R)-ST14X	11mm screw cap prefitted with a silicone/PTFE seal, pre-cut.		500
11-DSC(R)	11mm red screw cap.		500
11-6RT1	11mm type 6 red rubber/PTFE seal.		500
11-ST15	11mm white silicone/red PTFE seal.		500
11-ST14	11mm blue silicone/clear PTFE seal.		500
11-T02	11mm PTFE seal.		1000

PART NUMBER	DESCRIPTION	Screw Caps for 09-FISV, 2-SVW, 2-SVW(A), 03-FISV, 4-SVQ and 03-FISV(A)	PACK SIZE
9-SC(BLK)-BST1	9mm screw cap(black), prefitted with a bonded silicone/PTFE seal.		500
9-SC(GY)-BST1X	9mm screw cap(grey), prefitted with a bonded pre-cut silicone/PTFE seal.		500
9-SC(B)-8RT1	9mm screw cap (blue) prefitted rubber/PTFE seal.		500
9-SC(B)-8RT1X	9mm screw cap (blue) prefitted rubber/PTFE seal pre-cut.		500
9-SC(B)-ST1	9mm screw cap (blue) prefitted silicone/PTFE seal.		500
9-SC(B)-ST101	9mm screw cap (blue) prefitted silicone/PTFE seal for Thermo Scientific.		500
9-SC(B)-ST1X	9mm screw cap (blue) prefitted silicone/PTFE seal pre-cut.		500
9-SC(B)-TST1	9mm screw cap (blue) prefitted PTFE/silicone/PTFE seal.		500
9-SCS-8RT1	9mm solid screw cap (blue) prefitted rubber/PTFE seal - ideal for storage.		500
9-SCJ-ST15	9mm screw cap (black) with flange, prefitted with a silicone/PTFE seal.		500
9-SCJ-8RT1	9mm screw cap (black) with flange, prefitted with a rubber/PTFE seal.		500
9-SCJ-ST101	9mm screw cap (black) with flange, prefitted with a soft silicone/PTFE seal.		500
9-SCJ(W)-ST15	9mm screw cap (white) with flange, prefitted with a silicone/PTFE seal.		500
9-SCJ(W)-8RT1	9mm screw cap (white) with flange, prefitted with a rubber/PTFE seal.		500
9-SCJ(W)-ST101	9mm screw cap (white) with flange, prefitted with a soft silicone/PTFE seal.		500
9-SCJ(Y)-ST15	9mm screw cap (yellow) with flange, prefitted with a silicone/PTFE seal.		500
9-SCJ(Y)-8RT1	9mm screw cap (yellow) with flange, prefitted with a rubber/PTFE seal.		500
9-SCJ(Y)-ST101	9mm screw cap (yellow) with flange, prefitted with a soft silicone/PTFE seal.		500
9-MC*	Magnetic Cover for 9-SCJ Caps when used on Thermo Scientific and CTC.		100
9-SCJM-ST101*	9mm magnetic cover and screw cap, prefitted with a soft silicone/PTFE seal.		100

*The 9-MC is a magnetic cap that fits over any 9-SCJ cap, enabling wide necked screw top vials to be used in an autosampler where magnetic transport is used.



9-SCJM-ST101 with 2-SVW



Vials Using 9 and 11mm Screw Caps

PART NUMBER	DESCRIPTION	Accessories	PACK SIZE
B-100	Plastic storage tray with lid holding 100 vials with an o.d. of 12mm.		5
LP-1	Labelling pen for writing on vials with a 'write-on' patch.		1
T-105	Foam tray holding 105 vials with an o.d. of 12mm.		5
T-15/308	Hard tray holding 15 vials with an o.d. of 12mm and 15 vials with an o.d. of 6mm.		1
T-25	Aluminium tray holding 25 vials with an o.d. of 12mm.		1
T-104	Aluminium tray holding 104 vials with an o.d. of 12mm.		5



All of these vials are wide necked



Vials Using 12mm and 13mm Screw Caps

Key to products ■ Vial ■ Cap ■ Seal ■ Plug ■ Accessory

PART NUMBER	DESCRIPTION	Vials	SIZE	PACK SIZE
10-SV	10mL screw top round bottom vial - clear.		13 x 100mm	125
5-SV	5mL screw top round bottom vial - clear.		13 x 65mm	125
4-SV	4mL screw top vial - clear.		15 x 46mm	500
4-SV(A)	4mL screw top vial - amber.		15 x 46mm	500
3.5-HRSV	3.5mL screw top vial - High Recovery - uses 13mm screw caps.		15 x 46mm	500

PART NUMBER	DESCRIPTION	Screw Caps and Plugs	SPECIAL NOTE	PACK SIZE
13-SC-8RT1	13mm screw cap prefitted type 8 rubber/PTFE seal.		For 3.5-HRSV.	500
13-SC-ST15	13mm screw cap prefitted silicone/PTFE seal.		For 3.5-HRSV.	500
13-SC(W)-ST15X	13mm screw cap prefitted silicone/PTFE seal - pre-cut.		For 3.5-HRSV.	500
12-SC-8RT1	Cap with rubber PTFE seal.		General purpose.	500
12-SC-ST2	Cap with white silicone/red PTFE seal.		Suitable for Waters WISP.	200
12-SC	Black cap.			500
12-SC(R)	Red cap.			500
12-SC(W)	White cap.			500
12-SC(WG)	Green cap.			500
12-SC(Y)	Yellow cap.			500
12-SCS	Black solid cap, no central hole.		For long term storage and general purpose.	500
12-PEP4	Polyethylene plug.		For 4mL screw cap vials.	1000
12-SCP	Polyethylene snap cap plug.		For 4mL screw cap vials.	500

PART NUMBER	DESCRIPTION	Seals	SPECIAL NOTE	PACK SIZE
12-6RT1	Type 6 natural rubber/PTFE seal.			500
12-ST2	White silicone/red PTFE seal.		Standard.	500
12-ST18	White silicone/red PTFE seal.			500
12-ST143	White silicone/PTFE seal.		Extremely soft.	500
12-ST101	Blue silicone/PTFE seal.		Good for ECD.	500
12-T02	PTFE seal.		Does not reseal.	1000

PART NUMBER	DESCRIPTION	Accessories	PACK SIZE
T-55	Aluminium tray for 55 vials that have an o.d. of 15mm.		5

ADDITIONAL NOTES

- Microsampling with a 5-SV can be achieved by using a 03-CVG, 02-CTVG or 01-CVG (see page 28) with an S-72 spring. Alternatively, the 07-CPV(A) (see page 30) may be used with an S-40.
- The 07-CPV(A) and 07-CPV (see page 30) are used by some Waters' customers as limited volume inserts in the 4mL vial, where an S-15 spring is used.
- The WS-7 (see page 78) support sleeve with one of our 2mL vials may be substituted for a 4mL vial in the Waters 717.



Neckless and PTFE Vials

Key to products ■ Vial ■ Cap ■ Plug ■ Combination Pack

Neckless Vials

PART NUMBER	DESCRIPTION	Neckless Vials	SPECIAL NOTE	PACK SIZE
■ 4-NWV-C	4mL neckless glass vial - clear, with polyethylene cap - for Waters 48.		15 x 46mm	100
■ 2.5-NV	2.5mL neckless vial - clear.		12 x 32mm	500
■ 1-NMV-C	1mL neckless glass vial - clear - with polyethylene cap - for Alcott™/Micromeritics.		8 x 36mm	1000
■ 1-NWV-C	1mL neckless glass vial - clear, with polyethylene cap - for Waters 96.		8 x 38mm	200
■ 1-NWV(A)-C	1mL neckless glass vial - amber, with polyethylene cap - for Waters 96.		8 x 38mm	200
■ 1-NWV	1mL neckless glass vial - clear - for Waters 96.		8 x 38mm	500
■ 4-PPNWV-C	4mL polypropylene neckless vial with a polyethylene cap - for Waters 48.		15 x 46mm	100
■ 1-PPNWV-C	1mL polypropylene neckless vial with a polyethylene cap - for Waters 96.		8 x 38mm	250
■ 07-HRPPNWV-C	700µL polypropylene high recovery neckless vial and plug - for Waters 96.		8 x 38mm	250



2.5-NV



1-NWV

PART NUMBER	DESCRIPTION	Plugs	SPECIAL NOTE	PACK SIZE
■ 12-NPEP4	12mm polyethylene plug.		For 2mL shell vials	1000
■ 8-NPWP	8mm polyethylene plug.		For Waters 96 position shell vials	1000

PTFE Vials

Chromacol has developed a number of vials made from pure PTFE. These unique vials are suitable for use when sample components are likely to stick to a glass surface or when samples are dissolved in an aggressive solvent.

PART NUMBER	DESCRIPTION	PTFE Vials	SIZE	PACK SIZE
■ 2-CVT	1.6mL PTFE vial		12 x 32mm	25
■ 06-CTVT	600µL PTFE vial		12 x 32mm	25
■ 03-CTVT	300µL PTFE vial		12 x 32mm	25



2-CVT



06-CTVT



03-CTVT

These 3 vials all use standard 11mm crimp caps (see page 32)

Headspace

Of the many headspace autosamplers currently available most use a 20mL, 10mL or 6mL vial. The exceptions are the headspace instruments from Teledyne® Tekmar™. These vials have a slightly larger diameter in order to maximise thermal contact and they must not be used in other headspace instruments.

Chromacol vials have a special design to ensure that the vial has the maximum possible strength to withstand higher positive internal pressures. The wall thickness is greater and the base is rounded to eliminate the weak area where the wall joins the base. The rim of the vial has a peak designed to press into the seal so that the seal is able to withstand higher pressures.

The headspace autosampler from CTC/Leap Technologies™ employs a unique magnetic system to transport the vials to and from the oven area. Our composite 20-MCBC crimp caps are ideal for this process. These caps with an aluminium skirt and a magnetic central disk, are easy to crimp and decap.



INSTRUMENTS	VIALS
Agilent	3,4,6,7,9,10,11
AI™ Cambridge	5,8
CTC/Leap	3,4,6,7,10,11
DANI™	3,4,6,7
DANI Purge and Trap	3,4
Fisons HS 500	6,7
Fisons HS 850	3,4
PerkinElmer	3,4,9,10,11
Shimadzu HSS-2B	1
Shimadzu AOC 5000	3,4,6,7,10,11
Tekmar	2,5,8
Varian	2,5,8

	VIALS	SIZE	VOLUME	PK SIZE
1	27-CV	30 x 60mm	27mL	125
2	22-CV	22 x 75mm	22mL	100
3	20-CV	22 x 75mm	20mL	100
4	20-CV(A)	22 x 75mm	20mL	100
5	12-CV	18 x 65mm	12mL	100
6	10-CV	22 x 45mm	10mL	100
7	10-CV(A)	22 x 45mm	10mL	100
8	9-CV	18 x 50mm	9mL	100
9	6-CV	22 x 38mm	6mL	100
10	20-HSV	22 x 75mm	20mL	100
11	10-HSV	22 x 45mm	10mL	100



PART NUMBER	DESCRIPTION	Crimp & Screw Top Combination Packs	PACK SIZE
20-HSVST3-CP	20mL screw top headspace vial and 18mm magnetic screw cap magnetic with prefitted silicone/PTFE liner.		125
20-CVCBT3-CP	20mL crimp top headspace vial and 20mm aluminium crimp cap with chlorobutyl/PTFE liner.		125
20-CVST3-CP	20mL crimp top headspace vial and 20mm aluminium crimp cap with silicone/PTFE liner.		125



Key to products ■ Vial ■ Cap ■ Seal ■ Plug ■ Accessory ■ Combination Packs

CODE	DESCRIPTION	SPECIAL NOTE	20mm Crimp Caps	PACK SIZE
20-ACB	Blank cap			500
20-MCB	Blank cap, tin plate, magnetic	For CTC, Fisons, Leap and Alpha M.O.S.™		500
20-MCBC*	Composite blue magnetic cap	For CTC, Fisons, Leap and Alpha M.O.S.		500
20-MCBC-ST3*	Composite blue magnetic cap with blue silicone/PTFE seal	For CTC, Fisons, Leap and Alpha M.O.S.		500
20-AC-CBT3	Cap with blue chlorobutyl/PTFE seal	Standard		500
20-AC-ST3	Cap with blue silicone/PTFE seal	Ideal for Shimadzu HSS-2B, very clean.		500

* Also available in red.

CODE	DESCRIPTION	SPECIAL NOTE	20mm Seals	PACK SIZE
20-AS3	White silicone/aluminium seal	For temperatures <170°C, aluminium face.		100
20-ASH3	Red silicone/aluminium seal	For temperatures >170°C, aluminium face.		100
20-B3P	Butyl rubber plug			500
20-CB3	Blue chlorobutyl seal			1000
20-CBT3	Blue chlorobutyl/PTFE seal			1000
20-CBT3B	Blue chlorobutyl/PTFE seal	Bellows type		1000
20-LLX	Blue silicone/PTFE seal	For use with liquid/liquid extraction.		100
20-ST3	Blue silicone/PTFE seal	Very clean for selective detectors.		500
20-ST3HT	Red silicone/PTFE seal	For temperatures up to 250°C.		100
20-ST15	Blue silicone/red PTFE seal	Preferred for Fisons.		500
20-ST101	Blue silicone/PTFE seal	Suitable for wash waste vials - not headspace.		500
20-1FB3	Butyl rubber freeze drying bung			2000
20-2FB3	Butyl rubber freeze drying bung			2000
18-ST101	18mm PTFE/silicone	Seal for 18-MS-C. (magnetic screw cap)		125

CODE	DESCRIPTION	18mm Magnetic Screw Caps and Seals	PACK SIZE
18-MS-CBT3	18mm screw cap - magnetic - 3mm chlorobutyl/PTFE liner.		125
18-MS-ST101	18mm screw cap - magnetic - 1mm silicone/PTFE liner - not prefitted.		125
18-MS-ST3	18mm screw cap - magnetic - 3mm silicone/PTFE liner.		125
18-MS-C	18mm magnetic screw cap for 20-HSV and 10-HSV.		125

CODE	DESCRIPTION	SPECIAL NOTE	Plastic Cap/Plug	PACK SIZE
20-PEPC5	Polyethylene snap cap plug	Short term storage.		250

PART NUMBER	DESCRIPTION	Accessories	PACK SIZE
CMS-0	Crimpmate benchtop crimp station, no jaws.		1
CMSP-0	Pneumatic Autocrimp benchtop crimp station, no jaws.		1
CMS-20	Crimpmate benchtop crimp station with 20mm jaw.		1
CMJ-20	Crimpmate benchtop crimp station jaw for 20mm crimp caps.		1
CMJF-20	Crimpmate benchtop crimp station jaw for 20mm flip top crimp caps.		1
CDJ-20	Crimpmate benchtop crimp station de-capping jaw for 20mm crimp caps.		1
CR-20	Hand crimper for 20mm crimp caps.		1
DCR-20	De-capper for 20mm crimp caps - pliers type.		1
DCB-20	De-capper for 20mm crimp caps - hand crimper type.		1
T-10/20	Hard tray-10 vial capacity for vials with 22mm o.d.		1
T-28	Aluminium tray-28 vial capacity for vials with 22mm o.d.		5

Newer high temperature headspace analysers require headspace seals which can operate at these higher temperatures without introducing additional components to the chromatogram. Our 20-ST3HT seal has been formulated for this requirement and may be used up to 250°C, depending also on the solvent being used.



High Recovery Storage Vials

Chromacol's new range of high recovery storage vials contain a tapered reservoir. This provides larger sample capacities whilst giving maximum sample recovery and prevent any waste of precious samples.

The tapered base acts to concentrate the sample in the centre of the reservoir where manual or automated syringes and pipettes can be utilised to extract to the last few microliters of liquid.

Manufactured from Type I Class A neutral borosilicate glass; the preferred material for long-term storage of organic liquid samples.

Vials with volumes up to 10mL have a new flatter base for enhanced stability in racks and trays.

2D barcode etching on base is compatible with vials from 3.8mL to 10mL



Key to products

■ Vial ■ Cap ■ Seal

High Recovery Storage Vials

PART NUMBER	DESCRIPTION	HEIGHT (MM)	ODX (MM)	FINISH AND 2D BARCODE COMPATIBILITY	VIAL FEATURES	PACK SIZE
60-HRSV	Clear glass high recovery vial - screw-60mL	143	28	24-400	Large volume with high level of sample recovery EPA Dimensions	50
40-HRSV	Clear glass high recovery vial - screw-40mL	103	28	24-400	Large volume with high level of sample recovery EPA Dimensions	50
20-HRSV	Clear glass high recovery vial - screw-20mL	67	28	24-400	Large volume with high level of sample recovery EPA Dimensions	50
10-HRSV	Clear glass high recovery vial - screw-10mL	61	21	18-400 2D	Flatter base and large volume with high level of sample recovery	100
5-HRSV	Clear glass high recovery vial - screw-5mL	51	17	15-425 2D	Flatter base for better stability in sampling trays.	100
4-HRSV	Clear glass high recovery vial - screw-4mL	51	15	13-425 2D	Flatter base for better stability in sampling trays.	100
3.8-HRSV(A)	Amber glass high recovery vial - screw-3.8mL	46	15	13-425 2D	Flatter base for better stability in sampling trays.	100
3.8-HRSV	Clear glass high recovery vial - screw-3.8mL	46	15	13-425 2D	Flatter base for better stability in sampling trays.	100
3.5-HRSV	Clear glass high recovery vial - screw-3.5mL	46	15	13-425	3.5mL screw top vial-High Recovery	250
1.5-HRHSV	Clear glass high recovery vial - screw-1.5mL	44	13	13-425	Long taper reservoir	100

Phenolic Caps for High Recovery Sample Storage

PART NUMBER	DESCRIPTION	SCREW THREAD FINISH	PACK SIZE
13-SCST(BLK)	Black phenolic closed top with rubber/PTFE liner	13-425	100
15-SCST(BLK)	Black phenolic closed top with rubber/PTFE liner	15-425	100
18-SCST(BLK)	Black phenolic closed top with rubber/PTFE liner	18-400	100
24-SCST(BLK)	Black phenolic closed top with rubber/PTFE liner	24-400	100

Phenolic Injection Caps for High Recovery Vials

PART NUMBER	DESCRIPTION	SCREW THREAD FINISH	PACK SIZE
13-SC(BLK)	Black phenolic cap-open top	13-425	100
15-SC(BLK)	Black phenolic cap-open top	15-425	100
18-SC(BLK)	Black phenolic cap-open top	18-400	100
24-SC(BLK)	Black phenolic cap-open top	24-400	100

Replacement Septa for Phenolic Injection Caps

PART NUMBER	DESCRIPTION	PACK SIZE
13-ST15	13mm PTFE/Silicone Seal for 13-SC cap	100
15-ST3	15mm PTFE/Silicone Seal for 15-SC cap	500
18-ST3	18mm PTFE/Silicone Seal for 18-SC cap	500
24-ST3S	24mm Silicone/PTFE Seal for 24-SC cap	100