



HICHROM

Chromatography Columns and Supplies

**LC CONSUMABLES
AND ACCESSORIES
Vials Caps and Inserts**

Catalogue 9

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VIALS, CAPS AND INSERTS

RSA™ - Reduced Surface Activity Glass Vials

- Detect low abundance analytes normally adsorbed by glass
- Prevent pH changes in vials before injection
- Prevent sample hydrolysis that can occur in vials
- Excellent choice for LC, LC-MS, GC and GC-MS

RSA™ (Reduced Surface Activity) glass autosampler vials supplied by MicroSolv Technology Corporation, have been specially developed for working with low abundance analytes. They have a reduced surface activity for basic compounds due to the elimination of the 'silicate layer' that results during the manufacturing process of normal glass vials and the reduction of surface metals often present in normal vials. RSA autosampler vials and inserts are not manufactured with coatings, but the significant reduction of silanols on the glass surface makes them an excellent choice for more demanding assays including LC-MS and GC-MS applications.

With standard borosilicate glass vials and inserts, aqueous sample diluents can deprotonate the surface hydroxyls, resulting in acidic silanols which can cause adsorption of basic compounds or change the sample solution pH, making them undetectable. With RSA glass vials and inserts there is virtually no loss of sample to the vial and no pH shifting, making analyses more reliable and reproducible.

RSA glass vials and inserts are ideal for all chromatography applications, but particularly for analysing low abundance basic samples and highly sensitive compounds, where ordinary glass vials would give poor results.

Ordering Information

Inserts and Vials – RSA AQ™ (Advanced Quality) Brand (100/pack)

Description	Catalogue No.	Price
Inserts, 29 x 6mm, 200µl, with attached plastic springs	9502S-02N-RS	
2ml vials, clear 9mm screw top with write-on patch	9509S-WCV-RS	
2ml vials, amber 9mm screw top with write-on patch	9509S-WAV-RS	
1.5ml vials, clear, Max Recovery, centre draining snap top	9512C-0CV-RS	
1.5ml vials, clear, Max Recovery, centre draining 9mm screw top	9512S-0CV-RS	
1.2ml, MRQ™ vials snap top, clear	9512C-0CV-T-RS	
1.2ml, MRQ™ vials 9mm screw top, clear	9512S-0CV-T-RS	
Vials with 300µl fused insert, snap top, clear	9532C-0CV-RS	
Vials with 300µl fused insert, 9mm screw top, clear	9532S-0CV-RS	

Screw Caps for RSA Vials – AQ™ Brand

Description	Catalogue No.	Price
Caps, light blue with fitted ultra pure silicone/PTFE septa, 100/pack	9509S-10C-B	
Caps, light blue with fitted ultra pure silicone/PTFE septa, 1000/case	9509S-10C-B-M	
Caps, light blue with preslit fitted ultra pure silicone/PTFE septa, 100/pack	9509S-30C-B	
Caps, light blue with preslit fitted ultra pure silicone/PTFE septa, 1000/case	9509S-30C-B-M	

Snap Caps for RSA Vials – MicroSolv Brand

Description	Catalogue No.	Price
Caps, blue with silicone/PTFE septa, 100/pack	9502C-10CB	
Caps, blue with silicone/PTFE septa, 1000/case	9502C-10CB-M	
Caps, blue with preslit silicone/PTFE septa, 100/pack	9502C-30CB	
Caps, blue with preslit silicone/PTFE septa, 1000/case	9502C-30CB-M	

Easy Purchase Packs – RSA AQ™ Brand (100/pack)

Description	Catalogue No.	Price
2ml amber write-on vials and light blue AQR screw caps with silicone/PTFE septa	9509S-1WAP-RS	
2ml clear write-on vials and light blue AQR screw caps with silicone/PTFE septa	9509S-1WCP-RS	
2ml amber write-on vials and light blue AQR screw caps with preslit silicone/PTFE septa	9509S-3WAP-RS	
2ml clear write-on vials and light blue AQR screw caps with preslit silicone/PTFE septa	9509S-3WCP-RS	
1.2ml clear MRQ™ vials and blue snap caps with silicone/PTFE septa	9512C-1MP-RS	
1.2ml clear MRQ™ vials and blue snap caps with preslit silicone/PTFE septa	9512C-3MP-RS	
300µl fused insert vials and light blue AQR screw caps with silicone/PTFE septa	9532S-1CP-RS	
300µl fused insert vials and light blue AQR screw caps with preslit silicone/PTFE septa	9532S-3CP-RS	
1.5ml Max Recovery Vials, clear and light blue AQR screw caps with silicone/PTFE septa	9512S-1CP-RS	
1.5ml Max Recovery Vials, clear and light blue AQR screw caps with preslit silicone/PTFE septa	9512S-3CP-RS	
1.2ml MRQ™ Vials, clear and light blue AQR screw caps with silicone/PTFE septa	9512S-1MP-RS	
1.2ml MRQ™ Vials, clear and light blue AQR screw caps with preslit silicone/PTFE septa	9512S-3MP-RS	



9512C-0CV-RS



9502S-02N-RS



9532S-0CV-RS



9512C-0CV-T-RS



9512S-0CV-T-RS



9509S-WCV-RS



9512S-0CV-RS



9532C-0CV-RS



9509S-WAV-RS

Please contact Hichrom for details of additional MicroSolv RSA AQ vials, caps and inserts not listed above.

Thermo Scientific Vials

Thermo Scientific offer an extremely wide portfolio of vial and cap products designed for any instrument and any application. They offer three key ranges of vials and caps – their original Thermo Scientific brand, National Scientific and Chromacol brand names.

Thermo Scientific Vials and Caps

a) MS Certified Vials – These are pre-cleaned, low particle, low background chromatography vials for every high sensitivity GC-MS or LC-MS application. A certificate of conformance is included in every pack. Caps are bonded to prevent septa push-through.

b) Premium Vials and Caps – This is a comprehensive range of vials and caps offering assured quality and compatibility with many HPLC and GC autosamplers.

- Screw, crimp and snap top vials
- Microsampling and high recovery vials with fixed inserts
- Made from superior quality 33 expansion borosilicate clear (Type 1, Class A) or 51A amber (Type 1, Class B) glass



Thermo Scientific National Vials and Caps

The Thermo Scientific National range contains one of the industry's widest selection of vials and caps for every application, from economical to premium products.

- National Certified vial kits are fully lot-tested including HPLC and GC analysis for 15 critical parameters. A certificate of conformance is included in every pack. Kits include 100 vials and caps
- Wide range of crimp, screw and snap top vials and caps and micro inserts
- Different material caps – phenolic caps for autoclaving and low temperature applications, polypropylene caps are chemically inert and suitable for most chromatography applications
- Open top caps, pre-assembled caps and septa, caps with bonded septa
- 6 or 9 drawer vial storerooms organise supplies and save valuable bench space. Vials racks are also available
- National Target DP 9mm wide opening screw threaded vials – some have colour-banded write-on patch for convenient sample identification
- Optional silanised (deactivated) glass provides optimal recovery of critical polar, labile or OH-interacting compounds
- Shell vials and inserts, headspace vials, storage vials etc.



National Target DP 9mm wide opening screw thread vials

Thermo Scientific Chromacol Vials and Caps

Chromacol vials and caps include some innovative products in micro- and precision sampling. They are high quality and manufactured to stringent tolerances for comprehensive autosampler compatibility.

- Crimp, screw and snap top vials and caps
- Manufactured from clear borosilicate glass (Type1 Class A or amber Type 1 Class B)
- GOLD grade glass quality, a low expansion high purity glass with an extremely low concentration of active sites
- Shell vials (1, 2 and 4ml) with polyethylene cap with starburst centre design for easy syringe needle penetration
- Headspace vials, caps and septa, storage vials



Chromacol 2ml screw thread vials and inserts

Thermo Scientific also offer a range of manual and electronic crimping and decrimping tools. Please enquire for details. Please contact Hichrom for ordering information for any of the Thermo Scientific ranges of vials and caps.

Macherey-Nagel Vials

Macherey-Nagel offer a wide range of vials and caps compatible with most manufacturers' GC and HPLC autosamplers.

- Crimp top vials with rim diameters of 8, 11, 13 or 20mm (N 8, N 11, N 13 or N 20)
- Screw thread vials in sizes N 8, N 9, N 10, N 13, N 18 and N 24 (EPA)
- Snap top vials in size N 11
- Micro inserts for use with standard sample vials for small sample volumes
- Sample vials with integrated conical micro insert for small sample volumes
- Crimp, screw and snap top caps in different materials and with different septa type
- Headspace vials, micro reaction vials, storage vials, shell vials, crimping tools



Crimp vials, caps and inserts



Screw vials, caps and inserts



Snap vials, caps and inserts



Please contact Hichrom for a copy of the Macherey-Nagel Vials and Caps brochure

A selection of some of the more popular vials is given below. Please enquire for details of vial sizes not included or for information on larger pack sizes.

Ordering Information

Description	Qty	Catalogue No.	Price
Crimp Top Vials and Caps			
1.5ml crimp top vial N 11, clear, wide opening	100/pk	70201HP	
1.5ml crimp top vial N 11, clear, wide opening, with label and scale	100/pk	702885	
1.5ml crimp top vial N 11, amber, wide opening, with label and scale	100/pk	702892	
Small sample volume (1.1ml) crimp neck vial N 11, clear, 15µl funnel	100/pk	702888	
Small sample volume (1.1ml) crimp neck vial N 11, clear, conical	100/pk	702141	
Small sample volume (1.1ml) crimp neck vial N 11, clear, conical with round pedestal glass plate	100/pk	702015	
Small sample volume crimp neck vial N 11, clear, flat bottom with integrated 0.2ml insert	100/pk	702891	
Small sample volume crimp neck vial N 11, amber, flat bottom with integrated 0.2ml insert	100/pk	702014	
N 11 aluminium crimp cap, silver, centre hole, natural rubber/TEF colourless septum	100/pk	70256	
N 11 aluminium crimp cap, silver, centre hole, silicone white/PTFE red septum	100/pk	70288	
Screw Cap Vials and Caps			
1.5ml screw neck vial N 9, clear, wide opening	100/pk	702282	
1.5ml screw neck vial N 9, amber, wide opening	100/pk	702293	
1.5ml screw neck vial N 9, clear, with label and scale, wide opening	100/pk	702283	
1.5ml screw neck vial N 9, clear, with label and scale, wide opening, silanized	100/pk	702078	
1.5ml screw neck vial N 9, amber, with label and scale, wide opening	100/pk	702284	
1.5ml screw neck vial N 9, amber, with label and scale, wide opening, silanized	100/pk	702079	
Small sample volume (1.1ml) screw neck vial N 9, clear, 15µl funnel	100/pk	702006	
Small sample volume screw neck vial N 9, clear, flat bottom with integrated 0.2ml insert	100/pk	702007	
Small sample volume screw neck vial N 9, amber, flat bottom with integrated 0.2ml insert	100/pk	702008	
Small sample volume polypropylene vial N 9, transparent, with 0.3ml inner cone	100/pk	702009	
N 9 PP screw cap, blue, with red rubber/FEP colourless septum, centre hole	100/pk	702732	
N 9 PP screw cap, blue, with silicone white/PTFE red septum, centre hole	100/pk	702287.1	
Snap Cap Vials and Caps			
1.5ml snap top vial N 11, clear	100/pk	702714	
1.5ml snap top vial N 11, clear, with label and scale	100/pk	702713	
1.5ml snap top vial N 11, amber, with label and scale	100/pk	702712	
Small sample volume snap top vial N 11, clear, flat bottom with integrated 0.2ml insert	100/pk	702709	
Small sample volume polypropylene vial N 11, transparent, with 0.3ml conical insert	100/pk	702809	
N 11 PE snap ring cap, blue with red rubber/TEF colourless septum	100/pk	702063	
N 11 PE snap ring cap, blue, with silicone white/PTFE red septum	100/pk	702710.1	
Inserts			
0.2ml Inserts for wide opening vial, clear, conical 15mm tip	100/pk	702813	
0.1ml Inserts for wide opening vial, clear, with plastic spring	100/pk	702818	
0.3ml Inserts for wide opening vial, clear, flat bottom	100/pk	702825	

Please contact Hichrom for information on vials and caps not listed. Discounts available for bulk orders – please enquire.