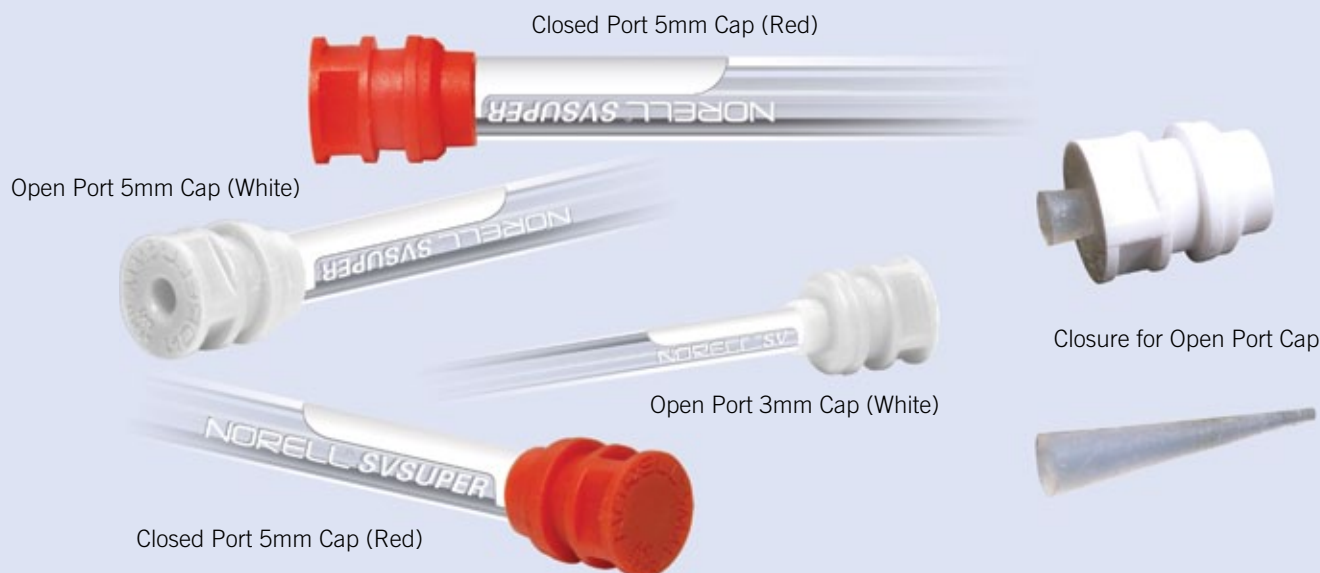


## Integrated Closure System

Introducing our new Sample Vault™ Series NMR tubes with Sample Vault™ caps (U.S. Patent No. 8,054,080), engineered for a new generation of high-throughput lab automation systems, including the Bruker SampleJet™. Designed to be used with 96 position carriers using 103.5mm (about 4") long NMR tubes with open port caps, or 178mm (7") long NMR tubes with closed port caps, Sample Vault™ caps have superior holding and sealing capabilities which eliminate cap / tube failure in your instrument. Our patented design incorporates a white band positioned on the NMR tube that aligns with the base of the cap, indicating a properly locked position. Together, our Sample Vault™ caps and Sample Vault™ tubes form an integrated closure system for fail-safe delivery of your sample into the magnet. We offer Sample Vault™ tubes in both 3mm & 5mm outer diameters for use up to 700 MHz and 950 MHz. Our proven quality and innovative engineering speaks for itself.



- Engineered for a new generation of high-throughput lab automation systems, such as the SampleJet™ system from Bruker.
- Two precision types available for up to 700 MHz and 950 MHz spectrometers.
- Superior Sample Vault™ cap (U.S. Patent No. 8,054,080) attaches semi-permanently for multiple uses and for critical applications.
- Choice of two Sample Vault™ cap styles: either closed port or open port, giving you the ultimate in choice of sample sealing.
- Closures are available to seal the Sample Vault™ Open Port caps. They are made of a soft, resilient silicone rubber that forms a very effective seal, with a high degree of inertness, solvent resistance and high temperature capability (up to 200°C). The closures are easily removed, and may be trimmed to length with a knife blade or scissors.
- Safe for cold refrigeration storage, works with cryo-probes and variable temperature studies.



# SAMPLE VAULT SERIES™ NMR TUBES

## Sample Vault™ Series NMR Tube Specifications Packed in Lots of 96 with Caps. Choose Open or Closed Port.

Item No.	MHz Rating	Cap Type	OD	Wall Size	Concentricity	Camber	Length
SVCP-5-103.5-96	Up to 700 MHz	Closed	5 mm	0.38 mm	40 µm	60 µm	103.5 mm
SVOP-5-103.5-96	Up to 700 MHz	Open	5 mm	0.38 mm	40 µm	60 µm	103.5 mm
SVCP-5-178-96	Up to 700 MHz	Closed	5 mm	0.38 mm	40 µm	60 µm	178 mm (7")
SVOP-5-178-96	Up to 700 MHz	Open	5 mm	0.38 mm	40 µm	60 µm	178 mm (7")
SVCP-3-103.5-96	Up to 700 MHz	Closed	3 mm	0.38 mm	40 µm	60 µm	103.5 mm
SVOP-3-103.5-96	Up to 700 MHz	Open	3 mm	0.38 mm	40 µm	60 µm	103.5 mm
SVCP-3-178-96	Up to 700 MHz	Closed	3 mm	0.38 mm	40 µm	60 µm	178 mm (7")
SVOP-3-178-96	Up to 700 MHz	Open	3 mm	0.38 mm	40 µm	60 µm	178 mm (7")
SVCP-Super-5-103.5-96	Up to 950 MHz	Closed	5 mm	0.38 mm	20 µm	30 µm	103.5 mm
SVOP-Super-5-103.5-96	Up to 950 MHz	Open	5 mm	0.38 mm	20 µm	30 µm	103.5 mm
SVCP-Super-5-178-96	Up to 950 MHz	Closed	5 mm	0.38 mm	20 µm	30 µm	178 mm (7")
SVOP-Super-5-178-96	Up to 950 MHz	Open	5 mm	0.38 mm	20 µm	30 µm	178 mm (7")
SVCP-Super-3-103.5-96	Up to 950 MHz	Closed	3 mm	0.38 mm	20 µm	30 µm	103.5 mm
SVOP-Super-3-103.5-96	Up to 950 MHz	Open	3 mm	0.38 mm	20 µm	30 µm	103.5 mm
SVCP-Super-3-178-96	Up to 950 MHz	Closed	3 mm	0.38 mm	20 µm	30 µm	178 mm (7")
SVOP-Super-3-178-96	Up to 950 MHz	Open	3 mm	0.38 mm	20 µm	30 µm	178 mm (7")

## Medium Wall and Heavy Wall Sample Vault™ NMR Tubes Packed in Lots of 5 with Caps. Choose Open or Closed Port.

Item No.	MHz Rating	Cap Type	OD (mm)	ID (mm)	Wall (mm)	Length (mm)	Concentricity	Camber
SVCP-Super-5-MW-103.5-5	Up to 950 MHz	Closed	4.97 ± 0.013	3.43 ± 0.025	0.8	103.5	20 µm	30 µm
SVOP-Super-5-MW-103.5-5	Up to 950 MHz	Open	4.97 ± 0.013	3.43 ± 0.025	0.8	103.5	20 µm	30 µm
SVCP-Super-5-HW-103.5-5	Up to 950 MHz	Closed	4.97 ± 0.013	2.20 ± 0.025	1.4	103.5	20 µm	30 µm
SVOP-Super-5-HW-103.5-5	Up to 950 MHz	Open	4.97 ± 0.013	2.20 ± 0.025	1.4	103.5	20 µm	30 µm

### Sample Vault™ Caps

Packed in Lots of 96. Choose Open or Closed Port.

Item No.	Cap Type	Cap Color	Size
SVCP-SAMPLEVAULT-3-96PK	Closed Port	Red	3 mm
SVOP-SAMPLEVAULT-3-96PK	Open Port	White	3 mm
SVCP-SAMPLEVAULT-5-96PK	Closed Port	Red	5 mm
SVOP-SAMPLEVAULT-5-96PK	Open Port	White	5 mm

### Closures to Seal the Sample Vault™ Open Port Caps

This closure will fit both the 3mm and 5mm Sample Vault™ Open Port caps.

Item No.	Description	Color	Packed in Lots of
SVC-SAMPLEVAULT-SRS	Tapered Silicone	Clear	50
	Rubber Plug	Translucent	100