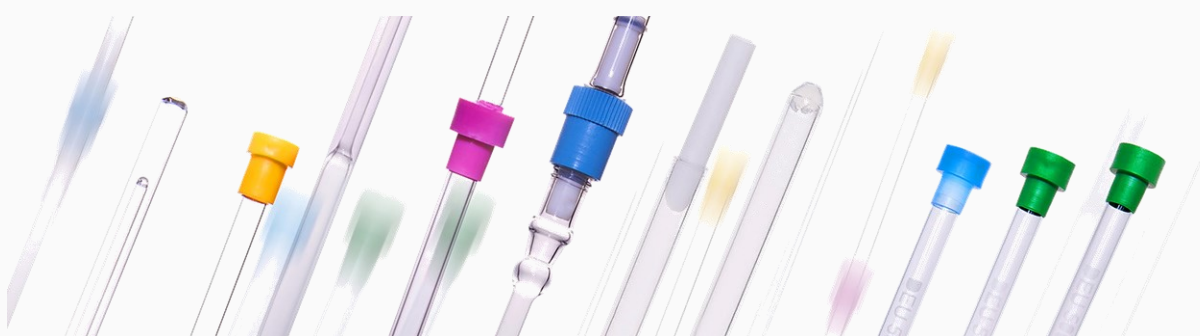


Product list



NMR tubes | Accessories

Product list – NMR tubes and accessories

5 mm NMR tubes (Boro 5.1, ASTM type 1 class B glass)*

Item No.	OD [mm]	wall thickness [mm]	concentricity [μm]	camber [μm]	length [inch]	tubes per packing unit
benchtop-5-7	4.950±0.040	0.43	25	75	7	100
boro-5-103,5-o	4.950±0.030		25	75	4	
boroeco-5-7					7	
boroeco-5-8					8	
boro300-5-7	4.950±0.020		7	25	7	5
boro300-5-8				8		
boro400-5-7	4.950±0.015		7	13	7	
boro400-5-8				8		
boro500-5-7	4.950±0.015		5	13	7	
boro500-5-8				8		
boro600-5-7	4.950±0.010		4	4	7	
boro600-5-8				8		
boro800-5-7	4.950±0.005	3	3	7		
boro800-5-8				8		

5 mm NMR tubes (Boro 3.3, ASTM type 1 class A glass)*

Item No.	OD [mm]	wall thickness [mm]	concentricity [μm]	camber [μm]	length [inch]	tubes per packing unit
d-5-103,5-o	4.950±0.030	0.38	25	25	4	100
d200-5-7					7	
d200-5-8					8	
d200-5-9					9	
d300-5-7	4.950±0.020		7	25	7	5
d300-5-8					8	
d300-5-9					9	
d400-5-7	4.950±0.015		7	13	7	
d400-5-8					8	
d400-5-9					9	
d500-5-7	4.950±0.015		5	13	7	
d500-5-8					8	
d500-5-9					9	
d600-5-7	4.950±0.010		5	7	7	
d600-5-8					8	
d600-5-9					9	

5 mm NMR tubes (Boro 5.1, ASTM type 1 class B glass)*

Item No.	OD [mm]	wall thickness [mm]	concentricity [μm]	camber [μm]	length [inch]	tubes per packing unit
boroeco-5-7-plus	4.950±0.030	0.40	25	75	7	100
boro400-5-7-plus	4.950±0.015		7	13		5
deuquant-5-7	4.966±0.004		4	4		5

3 mm NMR tubes (Boro 3.3, ASTM type 1 class A glass)*

Item No.	OD [mm]	wall thickness [mm]	concentricity [μm]	camber [μm]	length [inch]	tubes per packing unit
d-3-103,5-o deco-3-7	2.970±0.030	0.30	25	75	4 7	100 50
d300-3-7	2.970±0.020		7	25	7	5
d600-3-7	2.970±0.010		4	4		
d800-3-7	2.970±0.005		3	3		

10 mm NMR tubes (Boro 5.1, ASTM type 1 class B glass)*

Item No.	OD [mm]	wall thickness [mm]	concentricity [μm]	camber [μm]	length [inch]	tubes per packing unit
boroeco-10-7 boroeco-10-8	9.950±0.030	0.60	254	51	7 8	100
boro300-10-7 boro300-10-8	9.950±0.020		76	38	7 8	3
boro500-10-7 boro500-10-8	9.950±0.010		38	13	7 8	

NMR caps

Item No.	size	color	caps per packing unit
caps-5-100	5 mm	random color	100
caps-5-100-X	5 mm	X = a (aqua)  b (blue)  o (orange)  r (red)  y (yellow)  f (fuchsia)  pk (pink)  s (sky)  bk (black)  g (green)  p (purple)  w (white)  as (assorted)	
caps-3-100	3 mm	red 	
caps-10-100	10 mm	red 	
caps-5-10-ptfe caps-5-100-ptfe	5 mm PTFE	white 	10 100

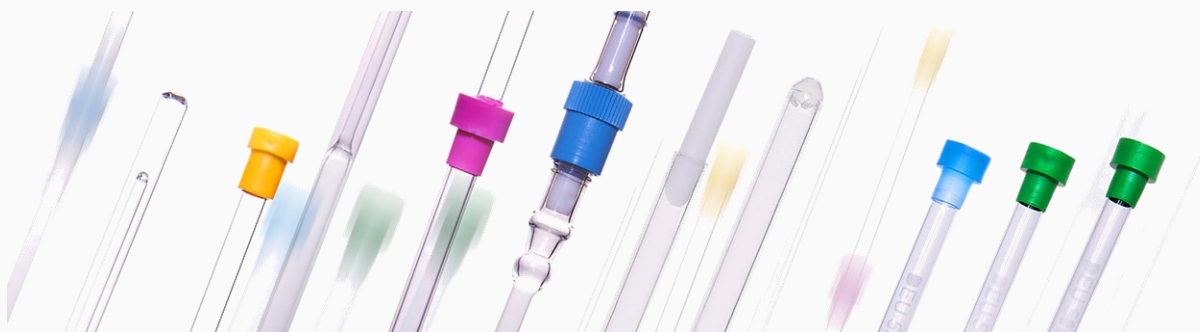
5 mm amber NMR tubes*

Item No. ¹	OD [mm]	wall thickness [mm]	concentricity [μm]	camber [μm]	length [inch]	tubes per packing unit
boro300-5-7-amb	4.950±0.020	0.43	7	25	7	5
boro400-5-7-amb	4.950±0.015		7	13		
boro500-5-7-amb	4.950±0.015		5	13		
d300-5-7-amb	4.950±0.020	0.38	7	25	7	5
d400-5-7-amb	4.950±0.015		7	13		
d500-5-7-amb	4.950±0.015		5	13		

¹boro300-500: Boro 5.1, ASTM type 1 class B glass, d300-d500: Boro 3.3, ASTM type 1 class A glass

5 mm quartz NMR tubes (Silicon dioxide, SiO₂)*

Item No.	OD [mm]	wall thickness [mm]	concentricity [μm]	camber [μm]	length [inch]	tubes per packing unit
qtz300-5-7	4.950±0.030	0.38	7	25	7	5
qtz500-5-7	4.950±0.015		5	13		



5 mm NMR tube



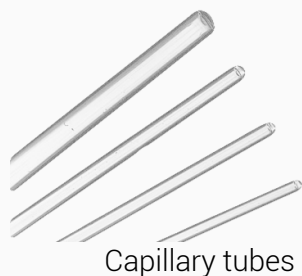
3 mm NMR tube



10 mm NMR tube



5 mm amber NMR tube



Capillary tubes



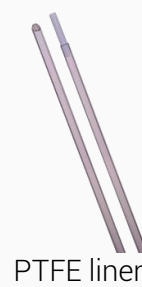
Constricted tubes



Screwcap tube



PTFE tube



PTFE liner



Complete tube



Coaxial tube



Shigemi tube

Capillary NMR tubes for Bruker MATCH (Boro 3.3, ASTM type 1 class A glass)

Item No.	OD [mm]	wall thickness [mm]	length [mm]	tubes per packing unit
match-b-2	2.000±0.010	0.2	100	10
match-b-2.5	2.500±0.010	0.2		
match-b-3	2.970±0.030	0.3		
match-b-5	4.950±0.030	0.43		

5 mm NMR tubes with **constriction (Boro 5.1, ASTM type 1 class B glass)***

Item No.	OD [mm]	wall thickness [mm]	concentricity [μm]	camber [μm]	length [inch]	tubes per packing unit
boroct300-5-7	4.950±0.020	0.43	7	25	7	5
boroct400-5-7	4.950±0.015		7	13		
boroct500-5-7	4.950±0.015		5	13		

5 mm NMR tubes with **screw cap septum or **closed top** (Boro 3.3, ASTM type 1 class A glass)***

Item No.	OD [mm]	wall thickness [mm]	concentricity [μm]	camber [μm]	length ¹ [inch]	tubes per packing unit
ds300-5-7 ds300-5-7-s	4.950±0.020	0.38	7	25	7	5
ds500-5-7 ds500-5-7-s	4.950±0.015		5	13		
screwcap screwcap-s	closed top septum top					1

¹The specified length refers to the tube below the screw connection.

5 mm NMR tubes with **PTFE valve (Boro 3.3, ASTM type 1 class A glass)***

Item No.	OD [mm]	wall thickness [mm]	concentricity [μm]	camber [μm]	length ¹ [inch]	tubes per packing unit
ptfe300-5-7 ptfe300-5-8	4.950±0.020	0.38	7	25	7 8	1
ptfe500-5-195 ptfe500-5-7 ptfe500-5-8	4.950±0.015		5	13	5 7 8	

¹ The specified length refers to the tube below the valve.

4 mm PTFE-liner with 5 mm NMR tube (Boro 3.3, ASTM type 1 class A glass)

Item No.	OD [mm]	wall thickness [mm]	concentricity [μm]	camber [μm]	length [inch]	tubes per packing unit
TL-4-8	4 mm				8	5
DTL-5-4-7	4.950±0.015	0.38	5	13	7 (tube) 8 (liner)	

5 mm complete coaxial NMR tubes (Boro 3.3, ASTM type 1 class A glass)

Item No.	OD [mm]	wall thickness [mm]	concentricity [μm]	camber [μm]	length [inch]	tubes per packing unit
complete-5-3-7 ¹	4.950±0.020	0.38	5	13	8 (inner tube) 7 (outer tube)	5

¹The 3 mm inner tube is fused at the bottom of a 5 mm outer tube and thus not removable.

5 mm coaxial NMR tubes (Boro 3.3, ASTM type 1 class A glass)

Item No.	OD [mm]	comment	wall thickness [mm]	concentricity [μm]	camber [μm]	length [inch]	tubes per packing unit
coaxialb-5-7 ¹	4.950±0.020	Bruker	0.38	7	25	7 (outer tube)	5
coaxialv-5-7 ¹		Varian				8 (inner tube)	
coaxial-5-7-ot ¹		outer tube only				7	

¹The coaxial tube consists of two separate NMR tubes: a 4 mm insert, which narrows to 2 mm towards the measurement area, and a matching 5 mm outer tube.

Reference tubes

Item No.	nucleus	comment	tubes per packing unit
tube-Li-standard	Li	1.0 M LiCl in D ₂ O	1
tube- ¹¹ B-standard	¹¹ B	15% BF ₃ ·OEt ₂ in CDCl ₃	
tube- ¹⁹ F-standard	¹⁹ F	CFCl ₃ (neat; with CDCl ₃ inner tube)	
tube- ²³ Na-standard	²³ Na	0.1M NaCl in D ₂ O	
tube-Al-standard	Al	1.1M Al(NO ₃) ₃ in D ₂ O	
tube- ³¹ P-standard	³¹ P	86% H ₃ PO ₄ (with CDCl ₃ inner tube)	
tube- ⁵⁵ Mn-standard	⁵⁵ Mn	0.82M KMnO ₄ in D ₂ O	
tube- ⁵⁹ Co-standard	⁵⁹ Co	0.56M K ₃ [Co(CN) ₆] in D ₂ O	
tube-Sn-standard	Sn	Me ₄ Sn 90% in C ₆ D ₆	
tube-Pt-standard	Pt	1.2M Na ₂ PtCl ₆ in D ₂ O	

5 mm Shigemi NMR tubes

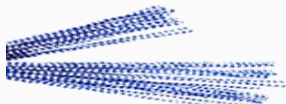
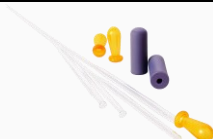
Item No.	solvent	comment	OD [mm]	bottom length [mm]	tubes per packing unit
BMS-005B	D ₂ O	Bruker	4.965±0.010	8	5
BMS-005V		Varian		15	
CMS-005B	CDCl ₃	Bruker		8	
CMS-005V		Varian		15	
DMS-005B	DMSO-d ₆ (Pyridine-d ₅ , C ₆ D ₆)	Bruker		8	
DMS-005V		Varian		15	
MMS-005B	CD ₃ OD (Acetonitrile-d ₃)	Bruker		8	
MMS-005V		Varian		15	
AMS-005B	Acetone-d ₆	Bruker		8	1
AMS-005V		Varian		15	
CS-005	Shigemi tube cap	all 5 mm	-	-	1

Other Shigemi products are available on request.

If you require a product that is not listed, please feel free to contact us with your request. Also, individual specifications are possible on demand.

NMR caps are included with all tubes unless indicated otherwise. Furthermore, our NMR tubes are tested using our in-house 500 MHz NMR spectrometer.

NMR Accessories

Item No.	description	product picture	pieces per packing unit
nmrrack	NMR tube rack for 72 tubes (5 mm)		1
washer	NMR tube washer, ground joint NS 29/32		1
pipe170	pipettebrush 170 mm		80
pipe300	pipettebrush 300 mm		50
brush	NMR brush for 5 mm tubes		1
vial-1,5	Vials with closure red rubber/ptfe (sandblasted field)		100
ms-4A-100g	4 Å molecular sieve, 100 g		many
ms-4A-250g	4 Å molecular sieve, 250 g		even more
torch	Micro torch 85 mm x 143 mm x 46 mm		1
pasteur150 pasteur230 pasteur310	Pasteur pipettes 150 mm Pasteur pipettes 230 mm Pasteur pipettes 310 mm		250
syr1 syr2 syr5 syr10	2-Part disposable syringes with luer tip 1 ml 2-Part disposable syringes with luer tip 2 ml 2-Part disposable syringes with luer tip 5 ml 2-Part disposable syringes with luer tip 10 ml		100
needle08x120 needle09x70 needle08x40	Disposable needles, luer tip 0.8 x 120 mm Disposable needles, luer tip 0.9 x 70 mm Disposable needles, luer tip 0.8 x 40 mm		
spatula	NMR Spatula 3 x 215 mm 18/8 stainless steel		1
ballon	Rubber ballon		1
stopper14 stopper29	Stopper with turn-over rim, NS14 Stopper with turn-over rim, NS29		1
funnel	NMR funnel		1
heatblock	NMR tube heatblock, 10 slots Ø 5 mm, 3 slots Ø 10 mm, 3 slots Ø 3 mm		1
ptfetape	PTFE tape, 0.1 mm x 12 mm x 12 m		1

DEUTERO

NMR Spectroscopy

Deutero GmbH
Am Ring 29
56288 Kastellaun
Germany

www.deutero.de

+496762 960230

info@deutero.de

Deutero GmbH is ISO 9001:2015 certified, ensuring consistently high product quality and reliable processes.
We take pride in delivering our products with very short lead times