

ARMAR *Chemicals*

Catalogue



NMR-Solvents / Deuterated Compounds
Reference Standards
NMR-Tubes / Equipment
Ampules / Bottles



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Dear NMR-User

You are holding the latest version of the ARMAR catalogue in your hands.

To enable us to react faster to fluctuation in prices and the availability of resources there are no more prices in this catalogue. We also felt, that quotations in Swiss Francs (CHF) did not do justice to our many customers abroad.

The current prices can now be looked up in our webshop in the following currencies: Swiss Francs (CHF), Euros (EUR) and US dollars (USD). The available stock for the relevant products are also indicated in the webshop. You do not require a login or a password to obtain this information or to place orders.

We look forward to continuing our successful cooperation.

Your ARMAR-Team



Adrian Geiger, CEO Armar AG

Geschätzter NMR-Anwender

Sie halten die aktuellste Version des ARMAR-Katalogs in den Händen.

Um schneller auf die jeweiligen Preisschwankungen und die Verfügbarkeit der Rohstoffe reagieren zu können, sind neu keine Preise mehr im Katalog vermerkt. Wir haben auch festgestellt, dass die Preisangaben in Schweizer Franken (CHF) unserer grossen Kundschaft ausserhalb der Schweiz nicht gerecht wurden.

Die aktuellen Preise können nun in unserem Webshop in den Währungen Schweizer Franken (CHF), Euro (EUR) und US-Dollar (USD) eingesehen werden. Zudem wird dort der verfügbare Lagerbestand für das entsprechende Produkt angezeigt. Diese Einsicht sowie auch sämtliche Bestellungen können ohne Login und Passwort erfolgen.

Wir freuen uns auf eine weiterhin gute Zusammenarbeit.

Ihr ARMAR-Team



NMR-Solvents / Deuterated Compounds



Acetic acid-d



CH₃COOD **C₂H₃DO₂** **CAS 758-12-3**

FW 61.06 UN 2789
d 1.07 ADR 8/PG2 (3)
mp 15-16°C store dark
bp 116-117°C

99 atom%D
 max 1% H₂O+D₂O (KF-Coulometer)
 min 99 atom%D (NMR)
99.5 atom%D
 max 0.5% H₂O+D₂O (KF-Coulometer)
 min 99.5 atom%D (NMR)

Cat-No	Quantity	Packaging
043500.2045	50 ml	bottle

043600.2040	25 ml	bottle
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Acetic-d₃ acid-d



CD₃COOD **C₂D₄O₂** **CAS 1186-52-3** **EC-No 214-693-4**

FW 64.08 UN 2789
d 1.12 ADR 8/PG2 (3)
mp 15-16°C store dark
bp 116-117°C

99 atom%D
 max 0.1% H₂O+D₂O (KF-Coulometer)
 min 99 atom%D (NMR)
99.5 atom%D
 max 0.05% H₂O+D₂O (KF-Coulometer)
 min 99.5 atom%D (NMR)

Cat-No	Quantity	Packaging
015500.2040	25 ml	bottle

015900.0010	10 x 0.75 ml	ampule
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015900.2035	10 ml	bottle
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015900.2040	25 ml	bottle
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Acetic anhydride-d₆



(CD₃CO)₂O **C₄D₆O₃** **CAS 16649-49-3** **EC-No 240-697-0**

FW 108.13 UN 1715
d 1.15 ADR 8/PG2 (3)
mp -73°C store dark
bp 138-140°C

99.5 atom%D
 min 99.5 atom%D (NMR)

Cat-No	Quantity	Packaging
043400.0030	5 ml	ampule

Acetone-d₆



CD₃COCD₃ **C₃D₆O** **CAS 666-52-4** **EC-No 211-563-9**

FW 64.13 UN 1090
d 0.88 ADR 3/PG2
mp -93.8°C store dark
bp 55.5°C

99 atom%D
 max 0.1% H₂O+D₂O (KF-Coulometer)
 min 99 atom%D (NMR)
99.5 atom%D
 max 0.05% H₂O+D₂O (KF-Coulometer)
 min 99.5 atom%D (NMR)
99.8 atom%D
 max 0.03% H₂O+D₂O (KF-Coulometer)
 min 99.8 atom%D (NMR)

99.9 atom%D
 max 0.025% H₂O+D₂O (KF-Coulometer)
 min 99.9 atom%D (NMR)

100 atom%D
 max 0.02% H₂O+D₂O (KF-Coulometer)
 min 99.95 atom%D (NMR)

Cat-No	Quantity	Packaging
010000.2045	50 ml	bottle

010100.2035	10 ml	bottle
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010100.2045	50 ml	bottle
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010300.0010	10 x 0.75 ml	ampule
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010300.2035	10 ml	bottle
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010300.2045	50 ml	bottle
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010200.0010	10 x 0.75 ml	ampule
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010200.2035	10 ml	bottle
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010500.0010	10 x 0.75 ml	ampule
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010500.2035	10 ml	bottle
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Acetonitrile-d₃

CD₃CN	C₂D₃N	CAS 2206-26-0	EC-No 218-616-5
FW 44.08	UN 1648		99 atom%D
d 0.84	ADR 3/PG2		max 0.1% H ₂ O+D ₂ O (KF-Coulometer)
bp 80.7° C	store dark		min 99 atom%D (NMR)
			99.5 atom%D
			max 0.05% H ₂ O+D ₂ O (KF-Coulometer)
			min 99.5 atom%D (NMR)
			99.8 atom%D
			max 0.03% H ₂ O+D ₂ O (KF-Coulometer)
			min 99.8 atom%D (NMR)
			99.9 atom%D
			max 0.025% H ₂ O+D ₂ O (KF-Coulometer)
			min 99.9 atom%D (NMR)
			100 atom%D
			max 0.02% H ₂ O+D ₂ O (KF-Coulometer)
			min 99.95 atom%D (NMR)

Cat-No	Quantity	Packaging
010600.2035	10 ml	bottle
010600.2045	50 ml	bottle

010700.2035	10 ml	bottle
010700.2040	25 ml	bottle

010800.0010	10 x 0.75 ml	ampule
010800.2035	10 ml	bottle
010800.2040	25 ml	bottle

011300.0010	10 x 0.75 ml	ampule
011300.2035	10 ml	bottle

010900.0010	10 x 0.75 ml	ampule
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Aceto-d₃ phenone

CD₃COC₆H₅	C₈H₅D₃O	CAS 17537-31-4	
FW 123.18	store <4° C		98 atom%D
d 1.06			min 98 atom%D (NMR)

Cat-No	Quantity	Packaging
040300.0031	5 g	ampule

Acetophenone-2'3'4'5'6-d₅

CH₃COC₆D₅	C₈H₃D₅O	CAS 28077-64-7	
FW 125.19	store <4° C		98 atom%D
d 1.07			min 98 atom%D (NMR)

Cat-No	Quantity	Packaging
040200.0031	5 g	ampule

Acetophenone-d₈

CD₃COC₆D₅	C₈D₈O	CAS 19547-00-3	
FW 128.22	store <4° C		98 atom%D
d 1.10			max 0.05% H ₂ O+D ₂ O (KF-Coulometer)
			min 98 atom%D (NMR)

Cat-No	Quantity	Packaging
040100.0030	5 ml	ampule

Acetylchloride-d₃

CD₃COCl	C₂D₃ClO	CAS 19259-90-6	EC-No 242-925-4
FW 81.52	UN 1717		99 atom%D
d 1.15	ADR 3/PG2 (8)		max 0.1% H ₂ O+D ₂ O (KF-Coulometer)
bp 50° C	store dark		min 99 atom%D (NMR)

Cat-No	Quantity	Packaging
040400.0030	5 ml	ampule

Ammonia-d₃ (gas)



ND₃	D₃N	CAS 13550-49-7	EC-No 236-926-9
FW 20.05	UN 1005		99 atom%D
mp -78° C	ADR 2.3/PG3 (8)		min 99 atom%D (NMR)
bp -33° C	transport by air not allowed (IATA-DGR)		pressure: 38 bar
	store at room temperature		

Cat-No	Quantity	Packaging
042500.9075	100 L	lecture bottle

Ammonium-d₄ deuterioxide, 25 wt% in Deuterium oxide



ND₃.D₂O	D₃N.D₂O	CAS 12168-30-8	EC-No 235-332-7
FW 40.08	UN 2672		99 atom%D
d 1.056	ADR 8/PG3		min 99 atom%D (NMR)
	store dark		min 25 wt% (tit)

Cat-No	Quantity	Packaging
040700.0035	10 ml	ampule
040700.2040	25 ml	bottle

Ammonium-d₄ formate-d



DCOOND₄	CD₅NO₂	CAS 65387-23-7	
FW 68.06	store dark		98 atom%D
			min 98 atom%D (NMR)

Cat-No	Quantity	Packaging
041000.2026	1 g	bottle
041000.2031	5 g	bottle

Ammonium-d₈ sulfate

(ND₄)₂SO₄	D₈N₂O₄S		
FW 140.2	store dark		98 atom%D
mp >280° C (dec)			min 98 atom%D (NMR)

Cat-No	Quantity	Packaging
041500.2031	5 g	bottle

Aniline-2'3'4'5'6-d₅



C₆D₅NH₂	C₆H₂D₅N	CAS 4165-61-1	EC-No 224-015-9
FW 98.17	UN 1547		98 atom%D
d 1.08	ADR 6.1/PG2		min 98 atom%D (NMR)
	store <4° C		

Cat-No	Quantity	Packaging
041700.0025	1 ml	ampule
041700.0030	5 ml	ampule

Aniline-d₇



C₆D₅ND₂	C₆D₇N	CAS 14545-23-4	EC-No 238-580-4
FW 100.19	UN 1547		98 atom%D
d 1.10	ADR 6.1/PG2		min 98 atom%D (NMR)
	store <4° C		

Cat-No	Quantity	Packaging
011400.0025	1 ml	ampule
011400.0030	5 ml	ampule

Anthracene-d₁₀

C₁₄D₁₀	CAS 1719-06-8	EC-No 217-004-5
FW 188.29	UN 3077 ADR 9/PG3 store dark	98 atom%D min 98 atom%D (NMR)

Cat-No	Quantity	Packaging
040000.2026	1 g	bottle

Benzene-d₆

C₆D₆	CAS 1076-43-3	EC-No 214-061-8
FW 84.16	UN 1114	99 atom%D
d 0.95	ADR 3/PG2	max 0.05% H ₂ O+D ₂ O (KF-Coulometer)
mp 6.8° C	store dark	min 99 atom%D (NMR)
bp 79.1° C		99.5 atom%D
		max 0.03% H ₂ O+D ₂ O (KF-Coulometer)
		min 99.5 atom%D (NMR)
		99.8 atom%D
		max 0.02% H ₂ O+D ₂ O (KF-Coulometer)
		min 99.8 atom%D (NMR)
		100 atom%D
		max 0.01% H ₂ O+D ₂ O (KF-Coulometer)
		min 99.95 atom%D (NMR)

Cat-No	Quantity	Packaging
011700.2035	10 ml	bottle
011700.2045	50 ml	bottle
011800.2035	10 ml	bottle
011800.2045	50 ml	bottle
012000.0010	10 x 0.75 ml	ampule
012000.2035	10 ml	bottle
012000.2040	25 ml	bottle
012200.0010	10 x 0.75 ml	ampule
012200.2035	10 ml	bottle

Benzoic-d₅ acid

C₆D₅CO₂H	C₇HD₅O₂	CAS 1079-02-3	EC-No 214-089-0
FW 127.15	UN 3077	99 atom%D	
mp 121-125° C	ADR 9/PG3	min 99 atom%D (NMR)	
bp 249° C	store dark		

Cat-No	Quantity	Packaging
043300.2026	1g	bottle

Biphenyl-d₁₀

C₆D₅-C₆D₅	C₁₂D₁₀	CAS 1486-01-7
FW 164.27	UN 3077	99 atom%D
mp 70-72° C	ADR 9/PG3 store dark	min 99 atom%D (NMR)

Cat-No	Quantity	Packaging
012100.2026	1g	bottle

Boric acid-d₃

D₃BO₃	BD₃O₃	CAS 14149-58-7
FW 64.86	store dark	98 atom%D
		min 98 atom%D (NMR)

Cat-No	Quantity	Packaging
041100.2031	5 g	bottle

Bromobenzene-d₅



C₆D₅Br	C₆BrD₅	CAS 4165-57-5	EC-No 224-013-8
FW 162.08	UN 2514	99.5 atom%D	
d 1.54	ADR 3/PG3	max 0.03% H ₂ O+D ₂ O (KF-Coulometer)	
bp 156° C	store dark	min 99.5 atom%D (NMR)	

Cat-No	Quantity	Packaging
012900.2030	5 ml	bottle
012900.2035	10 ml	bottle

1-Bromobutane-d₉



CD₃(CD₂)₃Br	C₄D₉Br	CAS 98195-36-9	
FW 146.02	UN 1126	99 atom%D	
bp 100-104° C	ADR 3/PG2	min 99 atom%D (NMR)	
	store dark		

Cat-No	Quantity	Packaging
011600.0026	1 g	ampule

Bromoethane-d₅



CD₃CD₂Br	C₂D₅Br	CAS 3675-63-6	EC-No 222-944-4
FW 114.00	UN 1891	99 atom%D	
d 1.53	ADR 6.1/PG2	min 99 atom%D (NMR)	
bp 37° C	store dark		

Cat-No	Quantity	Packaging
011900.0025	1 ml	ampule

Bromoform-d



GDBr₃	Br₃CD	CAS 2909-52-6	EC-No 220-823-0
FW 253.75	UN 2515	99.5 atom%D	
d 2.91	ADR 6.1/PG3	max 0.03% H ₂ O+D ₂ O (KF-Coulometer)	
bp 136.5° C	store <4° C	min 99.5 atom%D (NMR)	
stab with Cu			

Cat-No	Quantity	Packaging
012300.2036	10 g	bottle

1-Butanol-d₁



CH₃(CH₂)₃OD	C₄H₉DO	CAS 4712-38-3	EC-No 225-201-3
FW 75.13	UN 1120	99 atom%D	
d 0.82	ADR 3/PG3	max 0.5% H ₂ O+D ₂ O (KF-Coulometer)	
bp 118° C	store dark	min 99 atom%D (NMR)	

Cat-No	Quantity	Packaging
041300.2040	25 ml	bottle

1-Butanol-d₁₀



CD₃(CD₂)₃OD	C₄D₁₀O	CAS 34193-38-9	
FW 84.20	UN 1120	99 atom%D	
d 0.92	ADR 3/PG3	min 99 atom%D (NMR)	
bp 118° C	store dark		

Cat-No	Quantity	Packaging
012800.2030	5 ml	bottle

Chlorobenzene-d₅

C₆D₅Cl	C₆ClD₅	CAS 3114-55-4	EC-No 221-482-0
FW 117.60	UN 1134		99 atom%D
d 1.16	ADR 3/PG3		max 0.05% H ₂ O+D ₂ O (KF-Coulometer)
bp 130° C	store dark		min 99 atom%D (NMR)

Cat-No	Quantity	Packaging
013100.2030	5 ml	bottle

Chloroform-d



CDCl₃	CCl₃D	CAS 865-49-6	EC-No 212-742-4
FW 120.39	UN 1888		99.8 atom%D
d 1.50	ADR 6.1/PG3		max 0.02% H ₂ O+D ₂ O (KF-Coulometer)
mp -64° C	store <4° C		min 99.8 atom%D (NMR)
bp 60.9° C			
≥10ml stab. with Ag			100 atom%D
			max 0.01% H ₂ O+D ₂ O (KF-Coulometer)
			min 99.95 atom%D (NMR)

Cat-No	Quantity	Packaging
013300.0010	10 x 0.75 ml	ampule
013300.2040	25 ml	bottle
013300.2050	100 ml	bottle
013300.2060	500 ml	bottle
013500.0010	10 x 0.75 ml	ampule
013500.2040	25 ml	bottle
013500.2050	100 ml	bottle

Chloroform-d, cont. 0.03 v/v% TMS



CDCl₃	CCl₃D	CAS 865-49-6	EC-No 212-742-4
FW 120.39	UN 1888		99.8 atom%D
d 1.50	ADR 6.1/PG3		max 0.02% H ₂ O+D ₂ O (KF-Coulometer)
mp -64° C	store <4° C		min 99.8 atom%D (NMR)
bp 60.9° C			0.02-0.04 v/v% TMS (NMR)
≥10ml stab. with Ag			

Cat-No	Quantity	Packaging
013400.0010	10 x 0.75 ml	ampule
013400.2050	100 ml	bottle

Cumene-d₁₂ (Isopropylbenzene-d₁₂)

C₆D₅CD(CD₃)₂	C₉D₁₂	CAS 97732-82-6	
FW 132.27	UN 1918		99 atom%D
d 0.95	ADR 3/PG3		min 99 atom%D (NMR)
	store dark		

Cat-No	Quantity	Packaging
017300.0025	1 ml	ampule

Cyclohexane-d₁₂

C₆D₁₂		CAS 1735-17-7	EC-No 217-077-3
FW 96.26	UN 1145		99.5 atom%D
d 0.89	ADR 3/PG2		max 0.03% H ₂ O+D ₂ O (KF-Coulometer)
bp 78° C	store dark		min 99.5 atom%D (NMR)

Cat-No	Quantity	Packaging
013800.0030	5 ml	ampule

Deuterium chloride, 0.1 M in Deuterium oxide

DCI	CID	CAS 7698-05-7	EC-No 231-715-8
FW 37.47 d 1.11	UN 1789 ADR 8/PG2 store dark		99.8 atom%D min 99.8 atom%D (NMR) 0.095-0.105 M (tit)

Cat-No	Quantity	Packaging
042700.2050	100 ml	bottle

Deuterium chloride, 1 M in Deuterium oxide

DCI	CID	CAS 7698-05-7	EC-No 231-715-8
FW 37.47 d 1.14	UN 1789 ADR 8/PG2 store dark		99.8 atom%D min 99.8 atom%D (NMR) 0.95-1.05 M (tit)

Cat-No	Quantity	Packaging
042300.2050	100 ml	bottle

Deuterium chloride, 20 wt% in Deuterium oxide

DCI	CID	CAS 7698-05-7	EC-No 231-715-8
FW 37.47 d 1.20	UN 1789 ADR 8/PG2 store dark		99.5 atom%D min 99.5 atom%D (NMR) min 20 wt% (tit) 100 atom%D min 99.95 atom%D (NMR) min 20 wt% (tit)



Cat-No	Quantity	Packaging
042000.2040	25 ml	bottle

042100.0035	10 ml	ampule
042100.2040	25 ml	bottle

Deuterium chloride, 38 wt% in Deuterium oxide

DCI	CID	CAS 7698-05-7	EC-No 231-715-8
FW 37.47 d 1.30	UN 1789 ADR 8/PG2 store dark		99.5 atom%D min 99.5 atom%D (NMR) min 38 wt% (tit)



Cat-No	Quantity	Packaging
042200.0035	10 ml	ampule

042200.2045	50 ml	bottle
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Deuterium oxide (Water-d₂, Heavy Water), LC-NMR - Quality

D ₂ O	CAS 7789-20-0	EC-No 232-148-9	Cat-No	Quantity	Packaging
FW 20.03 mp 3.8° C bp 101.4° C	store dark	10 atom%D min 10 atom%D (NMR) d 1.01	020900.2060 020900.2065	500 ml 1 L	bottle GL45 bottle GL45
		90 atom%D min 90 atom%D (NMR) d 1.10	021000.2060 021000.2065	500 ml 1 L	bottle GL45 bottle GL45

Deuterium oxide (Water-d₂, Heavy Water)

D ₂ O	CAS 7789-20-0	EC-No 232-148-9	Cat-No	Quantity	Packaging
FW 20.03 d 1.11 mp 3.8° C bp 101.4° C	store dark	99.8 atom%D min 99.8 atom%D (NMR) max 370 Bq/g Tritium	014100.0010 014100.1035 014100.2035 014100.2040 014100.2050 014100.2060	10 x 0.75 ml 10 ml 10 ml 25 ml 100 ml 500 ml	ampule septum vial bottle bottle bottle bottle
		100 atom%D min 99.98 atom%D (NMR) max 370 Bq/g Tritium	014400.0010 014400.1035 014400.2035 014400.2040 014400.2045	10 x 0.75 ml 10 ml 10 ml 25 ml 50 ml	ampule septum vial bottle bottle bottle

1,4-Dibromobenzene-d₄

C ₆ D ₄ Br ₂	CAS 4165-56-4	EC-No 232-148-9	Cat-No	Quantity	Packaging
FW 239.95 mp 88-90° C bp 222° C	store dark	99 atom%D min 99 atom%D (NMR)	012400.2026 012400.2031	1 g 5 g	bottle bottle

1,2-Dibromoethane-d₄

BrCD ₂ CD ₂ Br	C ₂ D ₄ Br ₂	CAS 22581-63-1	EC-No 245-102-8	Cat-No	Quantity	Packaging
FW 191.89 d 2.23 bp 131-132° C	UN 1605 ADR 6.1/PG1 transport by air not allowed (IATA-DGR) store dark	99 atom%D min 99 atom%D (NMR)	019700.2031	5 g	bottle	

1,2-Dichlorobenzene-d₄

C₆D₄Cl₂	CAS 2199-69-1	EC-No 218-606-0
FW 151.04	UN 1591	99 atom%D
d 1.34	ADR 6.1/PG3	max 0.05% H ₂ O+D ₂ O (KF-Coulometer)
bp 182° C	store dark	min 99 atom%D (NMR)

Cat-No	Quantity	Packaging
014500.0025	1 ml	ampule
014500.0030	5 ml	ampule

1,4-Dichlorobenzene-d₄

C₆D₄Cl₂	CAS 3855-82-1	
FW 151.04	UN 3077	98 atom%D
mp 54-56° C	ADR 9/PG3	min 98 atom%D (NMR)
bp 175° C	store dark	

Cat-No	Quantity	Packaging
012500.2026	1 g	bottle
012500.2031	5 g	bottle

Dichloromethane-d₂

CD₂Cl₂	CAS 1665-00-5	EC-No 216-776-0
FW 86.95	UN 1593	99.5 atom%D
d 1.36	ADR 6.1/PG3	max 0.03% H ₂ O+D ₂ O (KF-Coulometer)
bp 39° C	store dark	min 99.5 atom%D (NMR)
		99.8 atom%D
		max 0.02% H ₂ O+D ₂ O (KF-Coulometer)
		min 99.8 atom%D (NMR)
		99.9 atom%D
		max 0.015% H ₂ O+D ₂ O (KF-Coulometer)
		min 99.9 atom%D (NMR)
		100 atom%D
		max 0.01% H ₂ O+D ₂ O (KF-Coulometer)
		min 99.95 atom%D (NMR)

Cat-No	Quantity	Packaging
016900.0010	10 x 0.75 ml	ampule
016900.2030	5 ml	bottle
016900.2035	10 ml	bottle
016900.2040	25 ml	bottle
016900.2045	50 ml	bottle

017000.0010	10 x 0.75 ml	ampule
017000.2035	10 ml	bottle

017800.0010	10 x 0.75 ml	ampule
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017100.0010	10 x 0.75 ml	ampule
017100.2035	10 ml	bottle

Diethylether-d₁₀

(CD₃CD₂)₂O	C₄D₁₀O	CAS 2679-89-2	EC-No 220-235-4
FW 84.18	UN 1155	99 atom%D	
d 0.78	ADR 3/PG1	min 99 atom%D (NMR)	
bp 35° C	store <4° C		

Cat-No	Quantity	Packaging
014000.0025	1 ml	ampule
014000.0030	5 ml	ampule

N,N-Dimethylacetamide-d₉

CD₃CON(CD₃)₂	C₄D₉NO	CAS 116057-81-9
FW 96.18	store dark	99 atom%D
d 1.03		max 0.1% H ₂ O+D ₂ O (KF-Coulometer)
bp 165-167° C		min 99 atom%D (NMR)

Cat-No	Quantity	Packaging
012600.0025	1 ml	ampule
012600.0030	5 ml	ampule

Dimethyl-d₆ amine hydrochloride



(CD₃)₂NH x HCl C₂HD₆N . HCl CAS 53170-19-7 EC-No 258-409-7

FW 87.59 store dark **99.5 atom%D**
mp 172-174° C min 99.5 atom%D (NMR)

Cat-No	Quantity	Packaging
042800.3036	10 g	PE-bottle

Dimethylcarbonate-d₆ (Reagent Grade)



(CD₃O)₂CO C₃D₆O
FW 96.08 UN 1161 **99.5 atom%D**
d 1.15 ADR 3/PG2 max 0.05% H₂O+D₂O (KF-Coulometer)
bp 90.5° C store dark min 99.5 atom%D (NMR)

Cat-No	Quantity	Packaging
014800.0025	1 ml	ampule
014800.0030	5 ml	ampule

N,N-Dimethylformamide-d₁ (DMF-d₁)



DCON(CH₃)₂ C₃H₆DNO CAS 2914-27-4
FW 74.10 UN 2265 **99 atom%D**
d 0.96 ADR 3/PG3 max 0.1% H₂O+D₂O (KF-Coulometer)
bp 155° C store dark min 99 atom%D (NMR)

Cat-No	Quantity	Packaging
042900.0030	5 ml	ampule

N,N-Dimethyl-d₆-formamide (DMF-d₆)



HCON(CD₃)₂ C₃HD₆NO
FW 79.14 UN 2265 **99 atom%D**
d 1.03 ADR 3/PG3 max 0.1% H₂O+D₂O (KF-Coulometer)
bp 155° C store dark min 99 atom%D (NMR)

Cat-No	Quantity	Packaging
043000.0030	5 ml	ampule

N,N-Dimethylformamide-d₇ (DMF-d₇)



DCON(CD₃)₂ C₃D₇NO CAS 4472-41-7 EC-No 224-745-8
FW 80.15 UN 2265 **99.5 atom%D**
d 1.05 ADR 3/PG3 max 0.05% H₂O+D₂O (KF-Coulometer)
bp 155° C store dark min 99.5 atom%D (NMR)

99.8 atom%D
max 0.03% H₂O+D₂O (KF-Coulometer)
min 99.8 atom%D (NMR)

Cat-No	Quantity	Packaging
014600.0010	10 x 0.75 ml	ampule
014600.2030	5 ml	bottle
014600.2035	10 ml	bottle
014600.2040	25 ml	bottle
014700.2030	5 ml	bottle

Dimethylsulfate-d₆

$(\text{CD}_3)_2\text{SO}_2$	$\text{C}_2\text{D}_6\text{O}_4\text{S}$	CAS 15199-43-6	EC-No 239-257-0
FW 132.18	UN 1595		99.5 atom%D
d 1.40	ADR 6.1/PG1		max 0.03% H ₂ O+D ₂ O (KF-Coulometer)
bp 188° C	transport by air not allowed (IATA-DGR)		min 99.5 atom%D (NMR)
	store dark		

Cat-No	Quantity	Packaging
012700.0025	1 ml	ampule
012700.0030	5 ml	ampule

Dimethyl-¹³C₂,d₆-sulfate

$(^{13}\text{CD}_3)_2\text{SO}_2$	$^{13}\text{C}_2\text{D}_6\text{O}_4\text{S}$		
FW 134.20	UN 1595		99 atom%¹³C/99 atom%D
d 1.42	ADR 6.1/PG1		max 0.05% H ₂ O+D ₂ O (KF-Coulometer)
bp 188° C	transport by air not allowed (IATA-DGR)		min 99 atom% ¹³ C (NMR)
	store dark		min 99 atom%D (NMR)

Cat-No	Quantity	Packaging
030900.0026	1 g	ampule

Dimethyl-d₆ sulfoxide (DMSO-d₆)

$(\text{CD}_3)_2\text{SO}$	$\text{C}_2\text{D}_6\text{OS}$	CAS 2206-27-1	EC-No 218-617-0
FW 84.18	store dark		99 atom%D
d 1.19			max 0.1% H ₂ O+D ₂ O (KF-Coulometer)
bp 190° C			min 99 atom%D (NMR)
			99.5 atom%D
			max 0.05% H ₂ O+D ₂ O (KF-Coulometer)
			min 99.5 atom%D (NMR)
			99.8 atom%D
			max 0.03% H ₂ O+D ₂ O (KF-Coulometer)
			min 99.8 atom%D (NMR)
			99.9 atom%D
			max 0.025% H ₂ O+D ₂ O (KF-Coulometer)
			min 99.9 atom%D (NMR)
			100 atom%D
			max 0.02% H ₂ O+D ₂ O (KF-Coulometer)
			min 99.95 atom%D (NMR)

Cat-No	Quantity	Packaging
014900.2060	500 ml	bottle

015000.2050	100 ml	bottle
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015100.0010	10 x 0.75 ml	ampule
015100.1035	10 ml	septum vial
015100.2035	10 ml	bottle
015100.2040	25 ml	bottle
015100.2045	50 ml	bottle
015100.2050	100 ml	bottle

015200.0005	10 x 0.5 ml	ampule
015200.0009	10 x 0.6 ml	ampule
015200.0010	10 x 0.75 ml	ampule
015200.1035	10 ml	septum vial
015200.2035	10 ml	bottle
015200.2040	25 ml	bottle
015200.2045	50 ml	bottle

015300.0010	10 x 0.75 ml	ampule
015300.2035	10 ml	bottle
015300.2040	25 ml	bottle

Dimethyl-d₆ sulfoxide (DMSO-d₆), cont. 0.03 v/v% TMS

(CD₃)₂SO **C₂D₆O_S** **CAS 2206-27-1** **EC-No 218-617-0**

FW 84.18 store dark
d 1.19
bp 190° C

99.8 atom%D
 max 0.03% H₂O+D₂O (KF-Coulometer)
 min 99.8 atom%D (NMR)
 0.02-0.04 v/v% TMS (NMR)

Cat-No	Quantity	Packaging
015600.0010	10 x 0.75 ml	ampule
015600.2035	10 ml	bottle
015600.2040	25 ml	bottle

99.9 atom%D
 max 0.025% H₂O+D₂O (KF-Coulometer)
 min 99.9 atom%D (NMR)
 0.02-0.04 v/v% TMS (NMR)

016300.0005	10 x 0.5 ml	ampule
016300.0009	10 x 0.6 ml	ampule
016300.0010	10 x 0.75 ml	ampule
016300.2035	10 ml	bottle
016300.2040	25 ml	bottle

1,4-Dioxane-d₈



C₄D₈O₂ **CAS 17647-74-4** **EC-No 241-628-7**

FW 96.17 UN 1165
d 1.13 ADR 3/PG2
bp 99° C store <4° C

99 atom%D
 max 0.1% H₂O+D₂O (KF-Coulometer)
 min 99 atom%D (NMR)

Cat-No	Quantity	Packaging
014200.0010	10 x 0.75 ml	ampule
014200.0030	5 ml	ampule

Dodecane-d₂₆



CD₃(CD₂)₁₀CD₃ **C₁₂D₂₆** **CAS 16416-30-1**

FW 196.52 store dark
d 0.89
mp -12° C
bp 216° C

98 atom%D
 min 98 atom%D (NMR)

Cat-No	Quantity	Packaging
020000.0025	1 ml	ampule

Ethyl-d₅ acetate-d₃



CD₃CO₂C₂D₅ **C₄D₈O₂** **CAS 117121-81-0**

FW 96.15 UN 1173
d 0.98 ADR 3/PG2
bp 77° C store dark
mp -84° C

99 atom%D
 min 99 atom%D (NMR)

Cat-No	Quantity	Packaging
015700.0025	1 ml	ampule

Ethyl alcohol-d, anhydrous



CH₃CH₂OD **C₂H₅DO** **CAS 925-93-9** **EC-No 213-128-9**

FW 47.08 UN 1170
d 0.80 ADR 3/PG2
bp 78-79° C store dark

99.5 atom%D
 max 0.5% H₂O+D₂O (KF-Coulometer)
 min 99.5 atom%D (NMR)

Cat-No	Quantity	Packaging
044000.2045	50 ml	bottle
044000.2050	100 ml	bottle

Ethyl-d₅ alcohol-d, anhydrous (Ethanol-d₆)

CD₃CD₂OD	C₂D₆O	CAS 1516-08-1	EC-No 216-162-2
FW 52.12	UN 1170	99 atom%D	
d 0.89	ADR 3/PG2	max 1% H ₂ O+D ₂ O (KF-Coulometer)	
bp 78-79° C	store dark	min 99 atom%D (NMR)	

Cat-No	Quantity	Packaging
016700.0025	1 ml	ampule
016700.2030	5 ml	bottle

Ethylbenzene-d₁₀

C₆D₅CD₂CD₃	C₈D₁₀	CAS 25837-05-2	EC-No 247-292-8
FW 116.23	UN 1175	99 atom%D	
d 0.95	ADR 3/PG2	min 99 atom%D (NMR)	
bp 134.6° C	store dark		

Cat-No	Quantity	Packaging
043700.0025	1 ml	ampule

Ethylene glycol-d₂

DOCH₂CH₂OD	C₂H₄D₂O₂	CAS 2219-52-5	
FW 64.09	store dark	98 atom%D	
d 1.15		max 1% H ₂ O+D ₂ O (KF-Coulometer)	
mp -13° C		min 98 atom%D (NMR)	
bp 196-198° C			

Cat-No	Quantity	Packaging
043900.2035	10 ml	bottle

Ethylene-d₄ glycol-d₂

DOCD₂CD₂OD	C₂D₆O₂	CAS 15054-86-1	EC-No 239-122-6
FW 68.11	store dark	99 atom%D	
d 1.22		min 99 atom%D (NMR)	
mp -13° C			
bp 196-198° C			

Cat-No	Quantity	Packaging
017200.0025	1 ml	ampule
017200.0030	5 ml	ampule

Fluorobenzene-d₅

C₆D₅F		CAS 1423-10-5	EC-No 215-831-6
FW 101.14	UN 2387	98 atom%D	
d 1.08	ADR 3/PG2	max 0.05% H ₂ O+D ₂ O (KF-Coulometer)	
bp 84-85° C	store dark	min 98 atom%D (NMR)	

Cat-No	Quantity	Packaging
021100.0026	1 g	ampule
021100.0031	5 g	ampule

Formic-d acid, 95 wt% in Water

DCOOH	CHDO₂	CAS 917-71-5	
FW 47.04	UN 1779	98 atom%D	
d 1.25	ADR 8/PG2 (3)	min 98 atom%D (NMR)	
mp 8° C	store dark	min 95 wt% (tit)	
bp 100.8° C			

Cat-No	Quantity	Packaging
041200.2030	5 ml	bottle

Formic acid-d, 95 wt% in Deuterium oxide



HC00D	CHDO₂	CAS 925-94-0	EC-No 213-129-4
FW 47.04	UN 1779	98 atom%D	
d 1.25	ADR 8/PG2 (3)	min 98 atom%D (NMR)	
mp 8° C	store dark	min 95 wt% (tit)	
bp 100.8° C			

Cat-No	Quantity	Packaging
043200.2030	5 ml	bottle

Formic-d acid-d, 95 wt% in Deuterium oxide



DC00D	CD₂O₂	CAS 920-42-3	EC-No 213-057-3
FW 48.04	UN 1779	98 atom%D	
d 1.27	ADR 8/PG2 (3)	min 98 atom%D (NMR)	
mp 8° C	store dark	min 95 wt% (tit)	
bp 100.8° C			

Cat-No	Quantity	Packaging
011100.2030	5 ml	bottle

Furan-d₄, stab.



C₄D₄O		CAS 6142-90-1	
FW 72.10	UN 2389	99 atom%D	
d 0.991	ADR 3/PG1	min 99 atom%D (NMR)	
bp 32° C	transport by air not allowed		
stab. with	(IATA-DGR)		
0.025 wt% BHT	store <4° C		

Cat-No	Quantity	Packaging
016800.0025	1 ml	ampule

Heptane-d₁₆



CD₃(CD₂)₅CD₃	C₇D₁₆	CAS 33838-52-7	
FW 116.33	UN 1206	99 atom%D	
d 0.79	ADR 3/PG2	min 99 atom%D (NMR)	
bp 100° C	store dark		

Cat-No	Quantity	Packaging
016100.0025	1 ml	ampule
016100.0030	5 ml	ampule

Hexadecane-d₃₄



CD₃(CD₂)₁₄CD₃	C₁₈D₃₄	CAS 15716-08-2	
FW 260.69	store dark	99 atom%D	
d 0.89		min 99 atom%D (NMR)	
bp 287° C			

Cat-No	Quantity	Packaging
020100.0004	500 mg	ampule

Hexafluoroacetone trideuterate



F₃CCOCF₃ x 3 D₂O	C₃F₆O x 3 D₂O	CAS 109640-39-3	
FW 226.06	UN 2552	99.5 atom%D	
d 1.66	ADR 6.1/PG2	min 99.5 atom%D (NMR)	
	store dark	2.7-3.3 D ₂ O	

Cat-No	Quantity	Packaging
016000.2030	5 ml	bottle

1,1,1,3,3,3-Hexafluoro-2-propanol-d₂ (HFIP-d₂)

(CF₃)₂CDOD	C₃D₂F₆O	CAS 38701-74-5	EC-No 254-091-9
FW 170.05	UN 3265	99 atom%D	
d 1.61	ADR 8/PG2	max 0.1% H ₂ O+D ₂ O (KF-Coulometer)	
bp 59° C	store dark	min 99 atom%D (NMR)	

Cat-No	Quantity	Packaging
019800.0025	1 ml	ampule
019800.0030	5 ml	ampule

Hexamethylphosphoramide-d₁₈ (HMPA-d₁₈)

[(CD₃)₂N]₃PO	C₆D₁₈N₃OP		
FW 197.31	UN 2810	99.5 atom%D	
d 1.05	ADR 6.1/PG3	max 0.05% H ₂ O+D ₂ O (KF-Coulometer)	
bp 162-164° C	store dark	min 99.5 atom%D (NMR)	

Cat-No	Quantity	Packaging
015400.0025	1 ml	ampule
015400.0030	5 ml	ampule

Hexane-d₁₄

CD₃(CD₂)₄CD₃	C₆D₁₄	CAS 21666-38-6	
FW 100.29	UN 1208	99 atom%D	
d 0.77	ADR 3/PG2	min 99 atom%D (NMR)	
bp 70° C	store dark		

Cat-No	Quantity	Packaging
016500.0025	1 ml	ampule
016500.0030	5 ml	ampule

Iodoethane-d₅

CD₃CD₂I	C₂D₅I	CAS 6485-58-1	
FW 161.00	UN 1993	99 atom%D	
d 2.01	ADR 3/PG2	min 99 atom%D (NMR)	
mp -108° C	store <4° C		
bp 69-73° C			
stab. with Cu			

Cat-No	Quantity	Packaging
046100.2031	5 g	bottle

Iodomethane-d₃

CD₃I		CAS 865-50-9	EC-No 212-744-5
FW 144.96	UN 2644	99.5 atom%D	
d 2.30	ADR 6.1/PG1	max 0.03% H ₂ O+D ₂ O (KF-Coulometer)	
bp 42° C	transport by air not allowed	min 99.5 atom%D (NMR)	
stab. with Cu	(IATA-DGR)		
	store <4° C		

Cat-No	Quantity	Packaging
046000.2031	5 g	bottle
046000.2041	25 g	bottle

Lithium aluminium deuteride

LiAlD₄	AlD₄Li	CAS 14128-54-2	EC-No 238-980-6
FW 41.99	UN 1410	98 atom%D	
	ADR 4.3/PG1	min 98 atom%D (NMR)	
	store dark and dry	min 97 wt% assay	

Cat-No	Quantity	Packaging
045000.2026	1 g	bottle
045000.2031	5 g	bottle

Lithium deuteride



LiD	DLi	CAS 13587-16-1	EC-No 237-018-5
FW 8.96	UN 1414 ADR 4.3/PG1 store dark and dry		98 atom%D min 98 atom%D (NMR)

Cat-No	Quantity	Packaging
045400.2026	1 g	bottle

Malonic-d₂ acid-d₂



CD₂(COOD)₂	C₃D₄O₄	CAS 813-56-9	EC-No 212-385-4
FW 108.10 mp 130-132° C	store dark		99.5 atom%D min 99.5 atom%D (NMR)

Cat-No	Quantity	Packaging
045300.3036	10 g	PE-bottle

Mesitylene-d₁₂ (1,3,5-Trimethylbenzene-d₁₂)



C₆D₃(CD₃)₃	C₉D₁₂	CAS 69441-16-3	
FW 132.26 d 0.95	UN 2325 ADR 3/PG3 store dark		99 atom%D min 99 atom%D (NMR)

Cat-No	Quantity	Packaging
044400.0025	1 ml	ampule

Methyl alcohol-d



CH₃OD	CH₃DO	CAS 1455-13-6	EC-No 215-933-0
FW 33.05 d 0.81 bp 65.5° C	UN 1230 ADR 3/PG2 (6.1) store dark		99.5 atom%D max 0.1% H ₂ O+D ₂ O (KF-Coulometer) min 99.5 atom%D (NMR)

Cat-No	Quantity	Packaging
045800.2040	25 ml	bottle
045800.2050	100 ml	bottle

Methyl-d₃ alcohol



CD₃OH	CHD₃O	CAS 1849-29-2	EC-No 217-435-9
FW 35.07 d 0.87 bp 65.5° C	UN 1230 ADR 3/PG2 (6.1) store dark		99.5 atom%D max 0.05% H ₂ O+D ₂ O (KF-Coulometer) min 99.5 atom%D (NMR)

Cat-No	Quantity	Packaging
045500.0025	1 ml	ampule
045500.2030	5 ml	bottle

Methyl-d₃ alcohol-d (Methanol-d₄)

CD₃OD	CD₄O	CAS 811-98-3	EC-No 212-378-6
FW 36.07	UN 1230	99.8 atom%D	
d 0.89	ADR 3/PG2 (6.1)	max 0.03% H ₂ O+D ₂ O (KF-Coulometer)	
bp 65.5° C	store dark	min 99.8 atom%D (NMR)	

Cat-No	Quantity	Packaging
016400.0005	10 x 0.5 ml	ampule
016400.0009	10 x 0.6 ml	ampule
016400.0010	10 x 0.75 ml	ampule
016400.1035	10 ml	septum vial
016400.2035	10 ml	bottle
016400.2040	25 ml	bottle
016400.2045	50 ml	bottle

100 atom%D
max 0.02% H₂O+D₂O (KF-Coulometer)
min 99.95 atom%D (NMR)

016600.0010	10 x 0.75 ml	ampule
016600.2035	10 ml	bottle

Methyl-d₃ alcohol-d, cont. 0.03 v/v% TMS (Methanol-d₄)

CD₃OD	CD₄O	CAS 811-98-3	EC-No 212-378-6
FW 36.07	UN 1230	99.8 atom%D	
d 0.89	ADR 3/PG2 (6.1)	max 0.03% H ₂ O+D ₂ O (KF-Coulometer)	
bp 65.5° C	store dark	min 99.8 atom%D (NMR)	
		0.02-0.04 v/v% TMS (NMR)	

Cat-No	Quantity	Packaging
018600.0010	10 x 0.75 ml	ampule
018600.2035	10 ml	bottle
018600.2040	25 ml	bottle

Methyl-¹²C,₃d alcohol-d

¹²CD₃OD	¹²CD₄O	CAS 811-98-3	EC-No 212-378-6
FW 36.07	UN 1230	99.95 atom¹²C/99.5 atom%D	
d 0.89	ADR 3/PG2 (6.1)	max 0.05% H ₂ O+D ₂ O (KF-Coulometer)	
bp 65.5° C	store dark	min 99.95 atom% ¹² C (NMR)	
		min 99.5 atom%D (NMR)	

Cat-No	Quantity	Packaging
030700.2030	5 ml	bottle
030700.2035	10 ml	bottle

Methyl-¹³C,₃d alcohol-d

¹³CD₃OD	¹³CD₄O	CAS 32479-98-4	EC-No 212-378-6
FW 37.06	UN 1230	99 atom%¹³C/99 atom%D	
d 0.91	ADR 3/PG2 (6.1)	max 0.05% H ₂ O+D ₂ O (KF-Coulometer)	
bp 65.5° C	store dark	min 99 atom% ¹³ C (NMR)	
		min 99 atom%D (NMR)	

Cat-No	Quantity	Packaging
030800.0026	1 g	ampule
030800.0031	5 g	ampule

Methylcyclohexane-d₁₄

C₇D₁₄	CAS 10120-28-2	EC-No 233-325-3
FW 112.30	UN 2296	99.5 atom%D
d 0.88	ADR 3/PG2	max 0.03% H ₂ O+D ₂ O (KF-Coulometer)
bp 103° C	store dark	min 99.5 atom%D (NMR)

Cat-No	Quantity	Packaging
018000.0030	5 ml	ampule

Methyl-d₃ methacrylate-d₅, stab.



CD₂C(CD₃)COOCD₃ C₅D₈O₂ **CAS 35233-69-3** **EC-No 252-449-9**

FW 108.17 UN 1247 **99.5 atom%D**
d 1.03 ADR 3/PG2 min 99.5 atom%D (NMR)
stab. with store <4° C
10-100 ppm
Hydroquinone

Cat-No	Quantity	Packaging
045600.0025	1 ml	ampule
045600.0030	5 ml	ampule

Methyl-d₃ methacrylate-d₅, polymerized

store dark **99 atom%D**
 min 99 atom%D (NMR)

Cat-No	Quantity	Packaging
045700.2026	1 g	bottle

Molecular Sieve 3Å, deuterated

pellets store dark and dry **99.5 atom%D**
 min 99.5 atom%D (NMR)

Cat-No	Quantity	Packaging
032500.2031	5 g	bottle
032500.2041	25 g	bottle

Molecular Sieve 4Å, deuterated

pellets store dark and dry **99.5 atom%D**
 min 99.5 atom%D (NMR)

Cat-No	Quantity	Packaging
032600.2031	5 g	bottle
032600.2041	25 g	bottle

Naphthalene-d₈



C₁₀D₈ **CAS 1146-65-2** **EC-No 214-552-7**

FW 136.23 UN 1334 **98 atom%D**
mp 81-83° C ADR 4.1/PG3 min 98 atom%D (NMR)
 store dark

Cat-No	Quantity	Packaging
018200.2026	1 g	bottle

Nitric acid-d, 65 wt% in Deuterium oxide



DNO₃ **DO₃N** **CAS 13587-52-5** **EC-No 237-024-8**

FW 64.02 UN 2031 **99 atom%D**
d 1.35 ADR 8/PG2 (5.1) min 99 atom%D (NMR)
 store dark min 65 wt% (tit)

Cat-No	Quantity	Packaging
048400.0030	5 ml	ampule
048400.2040	25 ml	bottle

Nitrobenzene-d₅



C₆D₅NO₂ **CAS 4165-60-0** **EC-No 224-014-3**

FW 128.15 UN 1662 **99.5 atom%D**
d 1.25 ADR 6.1/PG2 max 0.03% H₂O+D₂O (KF-Coulometer)
 store dark min 99.5 atom%D (NMR)

Cat-No	Quantity	Packaging
019600.2030	5 ml	bottle
019600.2035	10 ml	bottle

Nitromethane-d₃

CD₃NO₂		CAS 13031-32-8	EC-No 235-892-2
FW 64.08	UN 1261	99 atom%D	
d 1.18	ADR 3/PG2	max 0.05% H ₂ O+D ₂ O (KF-Coulometer)	
bp 100° C	store dark	min 99 atom%D (NMR)	
		99.5 atom%D	
		max 0.03% H ₂ O+D ₂ O (KF-Coulometer)	
		min 99.5 atom%D (NMR)	

Cat-No	Quantity	Packaging
017400.2030	5 ml	bottle
017400.2035	10 ml	bottle
017500.2030	5 ml	bottle
017500.2035	10 ml	bottle

Octane-d₁₈

CD₃(CD₂)₆CD₃	C₈D₁₈	CAS 17252-77-6	EC-No 241-285-3
FW 132.38	UN 1262	99 atom%D	
d 0.82	ADR 3/PG2	min 99 atom%D (NMR)	
	store dark		

Cat-No	Quantity	Packaging
017600.0025	1 ml	ampule
017600.0030	5 ml	ampule

Paraformaldehyde-d₂

(CD₂O)_n	CD₂O	CAS 32008-59-6	
FW 32.04	UN 2213	99 atom%D	
mp 170° C (dec)	ADR 4.1/PG3	min 99 atom%D (NMR)	
	store dark		

Cat-No	Quantity	Packaging
048200.2026	1 g	bottle

Phenol-d₆

C₆D₅OD	C₆D₆O	CAS 13127-88-3	EC-No 236-063-8
FW 100.16	UN 1671	98 atom%D	
mp 38-40° C	ADR 6.1/PG2	min 98 atom%D (NMR)	
bp 180° C	store dark		

Cat-No	Quantity	Packaging
018900.2026	1 g	bottle

Phenyl-d₅-boronic acid

C₆D₅B(OH)₂	C₆H₂D₅BO₂	CAS 215527-70-1	
FW 126.96	store dark	98 atom%D	
mp 217-220° C		min 98 atom%D (NMR)	

Cat-No	Quantity	Packaging
048300.2026	1 g	bottle

(±)-1-Phenyl-d₅-ethanol

C₆D₅CH(OH)CH₃	C₈H₅D₅O		
FW 127.19	UN 2937	98 atom%D	
d 1.07	ADR 6.1/PG3	max 0.5% H ₂ O+D ₂ O (KF-Coulometer)	
	store <4° C	min 98 atom%D (NMR)	

Cat-No	Quantity	Packaging
047200.0025	1 ml	ampule

(±)-1-Phenylethan-d₉-ol



C₆D₅CD(OH)CD₃ **C₈HD₉O**

FW 131.22 UN 2937
d 1.10 ADR 6.1/PG3
 store <4° C

98 atom%D
 max 0.5% H₂O+D₂O (KF-Coulometer)
 min 98 atom%D (NMR)

Cat-No	Quantity	Packaging
047900.0025	1 ml	ampule
047900.0030	5 ml	ampule

Phosphoric acid-d₃, 85 wt% in Deuterium oxide



D₃PO₄ **D₃O₄P** **CAS 14335-33-2** **EC-No 238-285-0**

FW 101.02 UN 1805
d 1.74 ADR 8/PG3
 store dark

99 atom%D
 min 99 atom%D (NMR)
 min 85 wt% (tit)

Cat-No	Quantity	Packaging
048100.0035	10 ml	ampule
048100.2040	25 ml	bottle

Potassium deuteroxide, 30 wt% in Deuterium oxide



KOD **DOK** **CAS 24572-01-8** **EC-No 246-324-8**

FW 57.12 UN 1814
d 1.40 ADR 8/PG2
 store dark

99.8 atom%D
 min 99.8 atom%D (NMR)
 min 30 wt% (tit)

Cat-No	Quantity	Packaging
044600.3035	10 ml	PE-bottle
044600.3040	25 ml	PE-bottle

1-Propanol-d₁



CH₃CH₂CH₂OD **C₃H₇DO**

FW 61.10 UN 1274
bp 97° C ADR 3/PG3
 store dark

99 atom%D
 max 0.5% H₂O+D₂O (KF-Coulometer)
 min 99 atom%D (NMR)

Cat-No	Quantity	Packaging
044100.2041	25 g	bottle

2-Propanol-d₁



(CH₃)₂CHOD **C₃H₇DO** **CAS 3979-51-9** **EC-No 223-616-3**

FW 61.10 UN 1219
d 0.80 ADR 3/PG2
bp 82° C store dark

98 atom%D
 max 0.5% H₂O+D₂O (KF-Coulometer)
 min 98 atom%D (NMR)

Cat-No	Quantity	Packaging
044200.2040	25 ml	bottle

2-Propanol-d₇



(CD₃)₂CDOH **C₃HD₇O** **CAS 19214-96-1**

FW 67.16 UN 1219
d 0.88 ADR 3/PG2
bp 82° C store dark

99.5 atom%D
 max 0.5% H₂O+D₂O (KF-Coulometer)
 min 99.5 atom%D (NMR)

Cat-No	Quantity	Packaging
044300.0025	1 ml	ampule

2-Propanol-d₈

(CD₃)₂CDOD	C₃D₈O	CAS 22739-76-0	EC-No 245-189-2
FW 68.16	UN 1219	99.5 atom%D	
d 0.89	ADR 3/PG2	max 0.05% H ₂ O+D ₂ O (KF-Coulometer)	
bp 82° C	store dark	min 99.5 atom%D (NMR)	

Cat-No	Quantity	Packaging
016200.2030	5 ml	bottle

Pyridine-d₅

C₅D₅N		CAS 7291-22-7	EC-No 230-720-2
FW 84.14	UN 1282	99 atom%D	
d 1.05	ADR 3/PG2	max 0.1% H ₂ O+D ₂ O (KF-Coulometer)	
bp 114.4° C	store dark	min 99 atom%D (NMR)	
		99.5 atom%D	
		max 0.05% H ₂ O+D ₂ O (KF-Coulometer)	
		min 99.5 atom%D (NMR)	
		99.8 atom%D	
		max 0.03% H ₂ O+D ₂ O (KF-Coulometer)	
		min 99.8 atom%D (NMR)	
		100 atom%D	
		max 0.02% H ₂ O+D ₂ O (KF-Coulometer)	
		min 99.95 atom%D (NMR)	

Cat-No	Quantity	Packaging
020300.2040	25 ml	bottle

017700.0010	10 x 0.75 ml	ampule
017700.2035	10 ml	bottle

017900.0010	10 x 0.75 ml	ampule
017900.2035	10 ml	bottle

018100.0010	10 x 0.75 ml	ampule
018100.2035	10 ml	bottle

Sodiumacetate-d₃

CD₃COONa	C₂D₃NaO₂	CAS 39230-37-0	EC-No 254-366-3
FW 85.06	store dark	99 atom%D	
		min 99 atom%D (NMR)	

Cat-No	Quantity	Packaging
047300.3031	5 g	PE-bottle
047300.3036	10 g	PE-bottle

Sodium borodeuteride

NaBD₄	BD₄Na	CAS 15681-89-7	EC-No 239-764-7
FW 41.86	UN 1426	98 atom%D	
	ADR 4.3/PG1	min 98 atom%D (NMR)	
	store dark and dry		

Cat-No	Quantity	Packaging
047400.2026	1 g	bottle
047400.2031	5 g	bottle

Sodium deuterioxide, 0.1 M in Deuterium oxide

NaOD	DNaO	CAS 14014-06-3	EC-No 237-825-2
FW 41.01	UN 1824	99.8 atom%D	
d 1.11	ADR 8/PG2	min 99.8 atom%D (NMR)	
	store dark	0.095-0.105 M (tit)	

Cat-No	Quantity	Packaging
047000.3050	100 ml	PE-bottle

Sodium deuterioxide, 1 M in Deuterium oxide



NaOD	DNaO	CAS 14014-06-3	EC-No 237-825-2
FW 41.01 d 1.16	UN 1824 ADR 8/PG2 store dark		99.8 atom%D min 99.8 atom%D (NMR) 0.95-1.05 M (tit)

Cat-No	Quantity	Packaging
047100.3050	100 ml	PE-bottle

Sodium deuterioxide, 30 wt% in Deuterium oxide



NaOD	DNaO	CAS 14014-06-3	EC-No 237-825-2
FW 41.01 d 1.46	UN 1824 ADR 8/PG2 store dark		99.5 atom%D min 99.5 atom%D (NMR) min 30 wt% (tit)

Cat-No	Quantity	Packaging
047500.3035	10 ml	PE-bottle
047500.3040	25 ml	PE-bottle

Sodium deuterioxide, 40 wt% in Deuterium oxide



NaOD	DNaO	CAS 14014-06-3	EC-No 237-825-2
FW 41.01 d 1.56	UN 1824 ADR 8/PG2 store dark		99.5 atom%D min 99.5 atom%D (NMR) min 40 wt% (tit) 99.9 atom%D min 99.9 atom%D (NMR) min 40 wt% (tit)

Cat-No	Quantity	Packaging
047600.3045	50 ml	PE-bottle

047700.3035	10 ml	PE-bottle
047700.3040	25 ml	PE-bottle

Sodium formate-d



DCOONa	CDNaO ₂	CAS 3996-15-4	
FW 69.01 mp 255° C	store dark		99.5 atom%D min 99.5 atom%D (NMR)

Cat-No	Quantity	Packaging
048000.3036	10 g	PE-bottle

Sodium methoxide-d₃ (Reagent Grade)



NaOCD ₃	CD ₃ NaO		
FW 57.02 mp 300° C (decomp.)	UN 1431 ADR 4.2/PG2 (8) store dark		99.5 atom%D min 99.5 atom%D (NMR)

Cat-No	Quantity	Packaging
048600.2031	5 g	bottle

Styrene-d₃, stab.



C ₆ H ₅ CD:CD ₂	C ₈ H ₅ D ₃	CAS 3814-93-5	
FW 106.97 d 0.94 stab. with 0.5 wt% 4-tert.-Butylcatechol	UN 2055 ADR 3/PG3 store <4° C		98 atom%D max 0.05% H ₂ O+D ₂ O (KF-Coulometer) min 98 atom%D (NMR)

Cat-No	Quantity	Packaging
049300.0026	1 g	ampule

Styrene-d₃, polymerized

store dark

98 atom%D
min 98 atom%D (NMR)

Cat-No	Quantity	Packaging
048900.3026	1 g	PE-bottle

Styrene-d₅, stab.**C₆D₅CH:CH₂** **C₈H₃D₅** **CAS 5161-29-5**FW 109.07 UN 2055
d 0.95 ADR 3/PG3
stab. with store <4° C

0.5 wt%

4-tert.-Butylcatechol

98 atom%D
max 0.05% H₂O+D₂O (KF-Coulometer)
min 98 atom%D (NMR)

Cat-No	Quantity	Packaging
049200.0026	1 g	ampule

Styrene-d₈, stab.**C₆D₅CD:CD₂** **C₈D₈** **CAS 19361-62-7** **EC-No 242-995-6**FW 112.22 UN 2055
d 0.98 ADR 3/PG3
stab. with store <4° C

0.5 wt%

4-tert.-Butylcatechol

98 atom%D
max 0.05% H₂O+D₂O (KF-Coulometer)
min 98 atom%D (NMR)

Cat-No	Quantity	Packaging
049000.0026	1 g	ampule
049000.0031	5 g	ampule

Styrene-d₈, polymerized**CAS 27732-42-9**

store dark

98 atom%D
min 98 atom%D (NMR)

Cat-No	Quantity	Packaging
049400.3026	1 g	PE-bottle
049400.3036	10 g	PE-bottle

Sulfolane-d₈**C₄D₈O₂S**FW 128 store dark
d 1.35
bp 290° C**99 atom%D**
min 99 atom%D (NMR)

Cat-No	Quantity	Packaging
019900.0025	1 ml	ampule

Sulfuric acid-d₂, 98 wt% in Deuterium oxide**D₂SO₄** **D₂O₄S** **CAS 13813-19-9** **EC-No 237-464-0**FW 100.09 UN 1830
d 1.86 ADR 8/PG2
store dark**99.5 atom%D**
min 99.5 atom%D (NMR)
min 98 wt% (tit)

Cat-No	Quantity	Packaging
048500.2035	10 ml	bottle
048500.2040	25 ml	bottle
048500.2045	50 ml	bottle

Terephthalic-d₄-acid



C₆D₄-1,4-(COOH)₂ **C₈H₂D₄O₄** **CAS 60088-54-2** **EC-No 262-050-1**

FW 170.16 store dark **99 atom%D**
subl. 402° C min 99 atom%D (NMR)

Cat-No	Quantity	Packaging
049100.2026	1 g	bottle
049100.2031	5 g	bottle

1,1,2,2-Tetrachloroethane-d₂ (TCE-d₂)



Cl₂CDCl₂ **C₂Cl₄D₂** **CAS 33685-54-0** **EC-No 251-634-1**

FW 169.87 UN 1702 **99.5 atom%D**
d 1.62 ADR 6.1/PG2 max 0.03% H₂O+D₂O (KF-Coulometer)
bp 146° C store <4° C min 99.5 atom%D (NMR)

Cat-No	Quantity	Packaging
018300.0010	10 x 0.75 ml	ampule
018300.2035	10 ml	bottle
018300.2040	25 ml	bottle
018300.2045	50 ml	bottle

Tetrahydrofuran-d₈ (THF-d₈)



C₄D₈O **CAS 1693-74-9** **EC-No 216-898-4**

FW 80.17 UN 2056 **99.5 atom%D**
d 0.99 ADR 3/PG2 max 0.05% H₂O+D₂O (KF-Coulometer)
mp -106° C store <4° C min 99.5 atom%D (NMR)

Cat-No	Quantity	Packaging
018500.0010	10 x 0.75 ml	ampule
018500.2030	5 ml	bottle
018500.2035	10 ml	bottle
018500.2040	25 ml	bottle

99.8 atom%D
max 0.03% H₂O+D₂O (KF-Coulometer)
min 99.8 atom%D (NMR)

020400.2030	5 ml	bottle
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100 atom%D
max 0.02% H₂O+D₂O (KF-Coulometer)
min 99.95 atom%D (NMR)

019300.0025	1 ml	ampule
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Tetramethylsilane (TMS)



Si(CH₃)₄ **C₄H₁₂Si** **CAS 75-76-3** **EC-No 200-899-1**

FW 88.23 UN 2749 **99.9% GC**
d 0.64 ADR 3/PG1 min 99.9% (GC)
mp -99° C store <4° C confirm ¹H-NMR
bp 26-27° C

Cat-No	Quantity	Packaging
032000.2040	25 ml	bottle

Toluene-d₈

C₆D₅CD₃	C₇D₈	CAS 2037-26-5	EC-No 218-009-5
FW 100.21	UN 1294		99 atom%D
d 0.94	ADR 3/PG2		max 0.05% H ₂ O+D ₂ O (KF-Coulometer)
bp 110° C	store dark		min 99 atom%D (NMR)
			99.5 atom%D
			max 0.03% H ₂ O+D ₂ O (KF-Coulometer)
			min 99.5 atom%D (NMR)
			99.8 atom%D
			max 0.02% H ₂ O+D ₂ O (KF-Coulometer)
			min 99.8 atom%D (NMR)
			100 atom%D
			max 0.01% H ₂ O+D ₂ O (KF-Coulometer)
			min 99.95 atom%D (NMR)

Cat-No	Quantity	Packaging
019000.2040	25 ml	bottle

018700.0010	10 x 0.75 ml	ampule
018700.2035	10 ml	bottle
018700.2040	25 ml	bottle

018800.0010	10 x 0.75 ml	ampule
018800.2035	10 ml	bottle

019200.0025	1 ml	ampule
019200.0030	5 ml	ampule

1,3,5-Trichlorobenzene-d₃

C₆D₃Cl₃		CAS 1198-60-3	
FW 184.47	store dark		98 atom%D
mp 63-65° C			min 98 atom%D (NMR)

Cat-No	Quantity	Packaging
018400.2026	1 g	bottle

Trifluoroacetic acid-d (TFA-d)



CF₃COOD	C₂DF₃O₂	CAS 599-00-8	EC-No 209-961-2
FW 115.03	UN 2699		99.5 atom%D
d 1.50	ADR 8/PG1		max 0.05% H ₂ O+D ₂ O (KF-Coulometer)
bp 75° C	store dark		min 99.5 atom%D (NMR)

Cat-No	Quantity	Packaging
019100.0010	10 x 0.75 ml	ampule
019100.0035	10 ml	ampule

2,2,2-Trifluoroethanol-d₃

CF₃CD₂OD	C₂D₃F₃O	CAS 77253-67-9	EC-No 278-649-6
FW 103.06	UN 1986		98 atom%D
d 1.41	ADR 3/PG3		max 0.1% H ₂ O+D ₂ O (KF-Coulometer)
mp -44° C	store dark		min 98 atom%D (NMR)
bp 78° C			

Cat-No	Quantity	Packaging
021200.0025	1 ml	ampule
021200.0030	5 ml	ampule

3-(Trimethylsilyl)-1-propanesulfonic acid sodium salt (DSS)

(CH₃)₃Si(CH₂)₃SO₃Na	C₆H₁₅NaO₃SSi	CAS 2039-96-5	EC-No 218-031-5
FW 218.33	store dark		confirm ¹H - NMR

Cat-No	Quantity	Packaging
030500.2026	1 g	bottle
030500.2031	5 g	bottle

3-(Trimethylsilyl)propionic-2,2,3,3-d₄ acid sodium salt (TSP-d₄)

$(\text{CH}_3)_3\text{SiCD}_2\text{CD}_2\text{CO}_2\text{Na}$ $\text{C}_6\text{H}_9\text{D}_4\text{NaO}_2\text{Si}$ CAS 24493-21-8 EC-No 246-286-2
 FW 172.27 store dark 99 atom%D
 min 99 atom%D (NMR)

Cat-No	Quantity	Packaging
031300.3026	1 g	PE-bottle

Urea-d₄

D_2NCOND_2 $\text{CD}_4\text{N}_2\text{O}$ CAS 1433-11-0 EC-No 215-857-8
 FW 64.08 store dark 98 atom%D
 mp 132-135° C max 0.5% H₂O+D₂O (KF-Coulometer)
 min 98 atom%D (NMR)

Cat-No	Quantity	Packaging
049500.3041	25 g	PE-bottle

Water-¹⁸O, normalized

H_2^{18}O CAS 14314-42-2
 FW 20.03 store dark 97 atom%¹⁸O
 d 1.11 min 97 atom%¹⁸O
 mp 0° C
 bp 100° C

Cat-No	Quantity	Packaging
030600.0026	1 g	ampule

1,2-Xylene-d₁₀

$\text{C}_6\text{D}_4(\text{CD}_3)_2$ C_8D_{10} CAS 56004-61-6 EC-No 259-942-8
 FW 116.25 UN 1307 99.5 atom%D
 d 0.95 ADR 3/PG3 min 99.5 atom%D (NMR)
 bp 142° C store dark

Cat-No	Quantity	Packaging
019400.0030	5 ml	ampule
019400.0035	10 ml	ampule

1,4-Xylene-d₆

$\text{C}_6\text{H}_4(\text{CD}_3)_2$ $\text{C}_6\text{H}_4\text{D}_6$ EC-No 247-033-9
 FW 112.25 UN 1307 99 atom%D
 bp 135° C ADR 3/PG3 min 99 atom%D (NMR)
 store dark

Cat-No	Quantity	Packaging
045900.0026	1 g	ampule

1,4-Xylene-d₁₀

$\text{C}_6\text{D}_4(\text{CD}_3)_2$ C_8D_{10} CAS 41051-88-1 EC-No 255-193-6
 FW 116.25 UN 1307 99.5 atom%D
 d 0.95 ADR 3/PG3 min 99.5 atom%D (NMR)
 bp 135° C store dark

Cat-No	Quantity	Packaging
019500.0030	5 ml	ampule
019500.0035	10 ml	ampule

Reference Standards



¹H Reference Standard / ¹H Lineshape

 1% CHCl₃ in Acetone-d₆

Tube length 203 mm	UN 1992	O.D. 1 mm
CoA included	ADR 3/PG2	O.D. 1.7 mm
	store <4° C	O.D. 2.5 mm
		O.D. 3 mm
		O.D. 5 mm
		O.D. 10 mm



Cat-No	Quantity	Packaging
RSA-HLSHP-1	1 pcs	box
RSA-HLSHP-1.7	1 pcs	box
RSA-HLSHP-2.5	1 pcs	box
RSA-HLSHP-3	1 pcs	box
RSA-HLSHP-5	1 pcs	box
RSA-HLSHP-10	1 pcs	box

¹H Reference Standard / ¹H Sensitivity

 0.1% Ethylbenzene (EB) in CDCl₃

Tube length 203 mm	UN 2810	O.D. 1 mm
CoA included	ADR 6.1/PG3	O.D. 1.7 mm
	store <4° C	O.D. 2.5 mm
		O.D. 3 mm
		O.D. 5 mm
		O.D. 10 mm



Cat-No	Quantity	Packaging
RSA-HSN-1	1 pcs	box
RSA-HSN-1.7	1 pcs	box
RSA-HSN-2.5	1 pcs	box
RSA-HSN-3	1 pcs	box
RSA-HSN-5	1 pcs	box
RSA-HSN-10	1 pcs	box

¹H Reference Standard / Water Suppression

 2mM Sucrose, 0.5mM DSS, 2mM NaN₃ in D₂O/H₂O 10/90

Tube length 203 mm	store dark	O.D. 1 mm
CoA included		O.D. 1.7 mm
		O.D. 2.5 mm
		O.D. 3 mm
		O.D. 5 mm
		O.D. 10 mm

Cat-No	Quantity	Packaging
RSA-HWS-1	1 pcs	box
RSA-HWS-1.7	1 pcs	box
RSA-HWS-2.5	1 pcs	box
RSA-HWS-3	1 pcs	box
RSA-HWS-5	1 pcs	box
RSA-HWS-10	1 pcs	box

¹³C Reference Standard / ¹³C Sensitivity (ASTM)

 40% Dioxane in Benzene-d₆

Tube length 203 mm	UN 1993	O.D. 1 mm
CoA included	ADR 3/PG2	O.D. 1.7 mm
	store <4° C	O.D. 2.5 mm
		O.D. 3 mm
		O.D. 5 mm
		O.D. 10 mm



Cat-No	Quantity	Packaging
RSA-ASTM-1	1 pcs	box
RSA-ASTM-1.7	1 pcs	box
RSA-ASTM-2.5	1 pcs	box
RSA-ASTM-3	1 pcs	box
RSA-ASTM-5	1 pcs	box
RSA-ASTM-10	1 pcs	box

¹³C Reference Standard / Pulse Calibration

 100mM Urea-¹⁵N, 100mM Methanol-¹³C in DMSO-d₆

Tube length 203 mm	UN 1992	O.D. 1 mm
CoA included	ADR 3/PG2 (6.1)	O.D. 1.7 mm
	store dark	O.D. 2.5 mm
		O.D. 3 mm
		O.D. 5 mm
		O.D. 10 mm



Cat-No	Quantity	Packaging
RSA-CNE-1	1 pcs	box
RSA-CNE-1.7	1 pcs	box
RSA-CNE-2.5	1 pcs	box
RSA-CNE-3	1 pcs	box
RSA-CNE-5	1 pcs	box
RSA-CNE-10	1 pcs	box

¹³C Reference Standard / DEPT100mg/ml Cholesterylacetate in CDCl₃

Tube length 203 mm	UN 2810	0.D. 1 mm
CoA included	ADR 6.1/PG3	0.D. 1.7 mm
	store <4° C	0.D. 2.5 mm
		0.D. 3 mm
		0.D. 5 mm
		0.D. 10 mm

Cat-No	Quantity	Packaging
RSA-DEPT-1	1 pcs	box
RSA-DEPT-1.7	1 pcs	box
RSA-DEPT-2.5	1 pcs	box
RSA-DEPT-3	1 pcs	box
RSA-DEPT-5	1 pcs	box
RSA-DEPT-10	1 pcs	box

²⁹Si Reference Standard / ²⁹Si Sensitivity85% HMDSO (Hexamethyldisiloxane) in Benzene-d₆

Tube length 203 mm	UN 1993	0.D. 1 mm
CoA included	ADR 3/PG2	0.D. 1.7 mm
	store dark	0.D. 2.5 mm
		0.D. 3 mm
		0.D. 5 mm
		0.D. 10 mm

Cat-No	Quantity	Packaging
RSA-SISN-1	1 pcs	box
RSA-SISN-1.7	1 pcs	box
RSA-SISN-2.5	1 pcs	box
RSA-SISN-3	1 pcs	box
RSA-SISN-5	1 pcs	box
RSA-SISN-10	1 pcs	box

Miscellaneous Reference Standard / Temperatur Calibration99.8% Methanol-d₄ – 1 cm fill height

Tube length 203 mm	UN 1230	0.D. 1 mm
CoA included	ADR 3/PG2 (6.1)	0.D. 1.7 mm
	store dark	0.D. 2.5 mm
		0.D. 3 mm
		0.D. 5 mm
		0.D. 10 mm

Cat-No	Quantity	Packaging
RSA-TEMP-1	1 pcs	box
RSA-TEMP-1.7	1 pcs	box
RSA-TEMP-2.5	1 pcs	box
RSA-TEMP-3	1 pcs	box
RSA-TEMP-5	1 pcs	box
RSA-TEMP-10	1 pcs	box

Miscellaneous Reference Standard / Temperatur Calibration99.8% Methanol-d₄ – 4 cm fill height

Tube length 203 mm	UN 1230	0.D. 1 mm
CoA included	ADR 3/PG2 (6.1)	0.D. 1.7 mm
	store dark	0.D. 2.5 mm
		0.D. 3 mm
		0.D. 5 mm
		0.D. 10 mm

Cat-No	Quantity	Packaging
RSA-TEMP4-1	1 pcs	box
RSA-TEMP4-1.7	1 pcs	box
RSA-TEMP4-2.5	1 pcs	box
RSA-TEMP4-3	1 pcs	box
RSA-TEMP4-5	1 pcs	box
RSA-TEMP4-10	1 pcs	box

Miscellaneous Reference Standard / Low Temperatur Calibration



4% Methanol in Methanol-d₄ – 1 cm fill height

Tube length 203 mm	UN 1230	O.D. 1 mm
CoA included	ADR 3/PG2 (6.1)	O.D. 1.7 mm
	store dark	O.D. 2.5 mm
		O.D. 3 mm
		O.D. 5 mm
		O.D. 10 mm

Cat-No	Quantity	Packaging
RSA-TEMPL-1	1 pcs	box
RSA-TEMPL-1.7	1 pcs	box
RSA-TEMPL-2.5	1 pcs	box
RSA-TEMPL-3	1 pcs	box
RSA-TEMPL-5	1 pcs	box
RSA-TEMPL-10	1 pcs	box

Miscellaneous Reference Standard / Low Temperatur Calibration



4% Methanol in Methanol-d₄ – 4 cm fill height

Tube length 203 mm	UN 1230	O.D. 1 mm
CoA included	ADR 3/PG2 (6.1)	O.D. 1.7 mm
	store dark	O.D. 2.5 mm
		O.D. 3 mm
		O.D. 5 mm
		O.D. 10 mm

Cat-No	Quantity	Packaging
RSA-TEMPL4-1	1 pcs	box
RSA-TEMPL4-1.7	1 pcs	box
RSA-TEMPL4-2.5	1 pcs	box
RSA-TEMPL4-3	1 pcs	box
RSA-TEMPL4-5	1 pcs	box
RSA-TEMPL4-10	1 pcs	box

Miscellaneous Reference Standard / High Temperatur Calibration



80% Glycol in DMSO-d₆ – 1 cm fill height

Tube length 203 mm	store dark	O.D. 1 mm
CoA included		O.D. 1.7 mm
		O.D. 2.5 mm
		O.D. 3 mm
		O.D. 5 mm
		O.D. 10 mm

Cat-No	Quantity	Packaging
RSA-TEMPH-1	1 pcs	box
RSA-TEMPH-1.7	1 pcs	box
RSA-TEMPH-2.5	1 pcs	box
RSA-TEMPH-3	1 pcs	box
RSA-TEMPH-5	1 pcs	box
RSA-TEMPH-10	1 pcs	box

Miscellaneous Reference Standard / High Temperatur Calibration



80% Glycol in DMSO-d₆ – 4 cm fill height

Tube length 203 mm	store dark	O.D. 1 mm
CoA included		O.D. 1.7 mm
		O.D. 2.5 mm
		O.D. 3 mm
		O.D. 5 mm
		O.D. 10 mm

Cat-No	Quantity	Packaging
RSA-TEMPH4-1	1 pcs	box
RSA-TEMPH4-1.7	1 pcs	box
RSA-TEMPH4-2.5	1 pcs	box
RSA-TEMPH4-3	1 pcs	box
RSA-TEMPH4-5	1 pcs	box
RSA-TEMPH4-10	1 pcs	box

NMR-Tubes / Equipment



5 mm NMR-Tubes, Type 5TA (Throw Away)

ASTM Type 1 Class B glass

O.D. (mm) 4.947 ± 0.019
 I.D. (mm) 4
 Camber T.I.R. 76 µm
 Concentricity T.I.R. 76 µm

yellow PE-caps included



178 mm

203 mm

200 MHz

Cat-No	Quantity	Packaging
032100.5045	50 pcs	cylinder
032105.5045	50 pcs	cylinder

5 mm NMR-Tubes, Type 5P (Precision)

ASTM Type 1 Class B glass

O.D. (mm) 4.947 ± 0.019
 I.D. (mm) 4
 Camber T.I.R. 13 µm
 Concentricity T.I.R. 51 µm

red PE-caps included



178 mm

203 mm

300 MHz

Cat-No	Quantity	Packaging
032110.5045	50 pcs	cylinder
032115.5045	50 pcs	cylinder

5 mm NMR-Tubes, Type 5HP (High Precision)

ASTM Type 1 Class B glass

O.D. (mm) 4.947 ± 0.019
 I.D. (mm) 4
 Camber T.I.R. 13 µm
 Concentricity T.I.R. 25 µm

green PE-caps included



178 mm

203 mm

400 MHz

Cat-No	Quantity	Packaging
032210.5030	5 pcs	box
032215.5030	5 pcs	box

5 mm NMR-Tubes, Type 5UP (Ultra Precision)

ASTM Type 1 Class B glass

O.D. (mm) 4.947 ± 0.019
 I.D. (mm) 4
 Camber T.I.R. 6 µm
 Concentricity T.I.R. 13 µm

blue PE-caps included



178 mm

203 mm

500 MHz

Cat-No	Quantity	Packaging
032310.5030	5 pcs	box
032315.5030	5 pcs	box

5 mm NMR-Tubes, Type 5SP (Selected Precision)

ASTM Type 1 Class B glass

O.D. (mm) 4.947 ± 0.019

I.D. (mm) 4

Camber T.I.R. 3.8 µm

Concentricity T.I.R. 3.8 µm

orange PE-caps included



178 mm

203 mm

600 MHz

Cat-No	Quantity	Packaging
032321.5030	5 pcs	box

032322.5030	5 pcs	box
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5 mm NMR-Tubes, Type 5HSP (High Selected Precision)

ASTM Type 1 Class B glass

O.D. (mm) 4.947 ± 0.019

I.D. (mm) 4

Camber T.I.R. 3.8 µm

Concentricity T.I.R. 2.5 µm

black PE-caps included



178 mm

203 mm

800 MHz

Cat-No	Quantity	Packaging
032324.5030	5 pcs	box

032325.5030	5 pcs	box
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5 mm amberized NMR-Tubes, Type 5P (Precision)

ASTM Type 1 Class B glass

O.D. (mm) 4.947 ± 0.019

I.D. (mm) 4

Camber T.I.R. 13 µm

Concentricity T.I.R. 51 µm

red PE-caps included



178 mm

203 mm

300 MHz

Cat-No	Quantity	Packaging
036000.5030	5 pcs	box

036001.5030	5 pcs	box
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5 mm amberized NMR-Tubes, Type 5UP (Ultra Precision)

ASTM Type 1 Class B glass

O.D. (mm) 4.947 ± 0.019

I.D. (mm) 4

Camber T.I.R. 6 µm

Concentricity T.I.R. 13 µm

blue PE-caps included



178 mm

203 mm

500 MHz

Cat-No	Quantity	Packaging
036020.5030	5 pcs	box

036021.5030	5 pcs	box
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5 mm QUARTZ NMR-Tube

Natural Quartz

O.D. (mm) 4.9635 ± 0.0065
 I.D. (mm) 4.2065 ± 0.0065
 Camber 25 µm
 Concentricity 13 µm

PE-cap included



178 mm

Cat-No	Quantity	Packaging
036005.5025	1 pcs	box

500 MHz

5 mm threaded DURAN NMR-Tube with screw cap

cap with PTFE seal



178 mm

Cat-No	Quantity	Packaging
036015.5025	1 pcs	bag

5 mm threaded DURAN NMR-Tube with open top screw cap

open top cap with PTFE/Silicon septum



178 mm

Cat-No	Quantity	Packaging
036016.5025	1 pcs	bag

PTFE/Silicon septum replacement part for Cat-No 036016.5025



036017.5044	48 pcs	bag
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Caps (PE) for 5 mm NMR-Tubes



	Cat-No	Quantity	Packaging
color: black	036023.5050	100 pcs	bag
color: blue	036024.5050	100 pcs	bag
color: green	036025.5050	100 pcs	bag
color: orange	036026.5050	100 pcs	bag
color: purple	036027.5050	100 pcs	bag
color: red	036028.5050	100 pcs	bag
color: white	036029.5050	100 pcs	bag
color: yellow	036030.5050	100 pcs	bag
color: pink	036043.5050	100 pcs	bag
color: sky	036044.5050	100 pcs	bag
color: fuchsia	036045.5050	100 pcs	bag
color: aqua	036046.5050	100 pcs	bag

Teflon® (PTFE) caps



	Cat-No	Quantity	Packaging
for 5 mm Tubes	036031.5035	10 pcs	bag

Septa for 5 mm NMR-Tubes



	Cat-No	Quantity	Packaging
color: white	036050.5050	100 pcs	bag
color: red	036051.5050	100 pcs	bag

Washing unit for 5 mm NMR-Tubes, Type Standard



	Cat-No	Quantity	Packaging
for 178 mm Tubes	036040.5025	1 pcs	bag

Washing unit for 5 mm NMR-Tubes, Type De Luxe

with joint NS 29/32
and vacuum take off



	Cat-No	Quantity	Packaging
for 178 mm Tubes	036041.5025	1 pcs	bag
for 203 + 228.5 mm Tubes	036042.5025	1 pcs	bag

Glass-Pipettes

for 178 and 203 mm NMR-Tubes
tip length 205 mm



Cat-No	Quantity	Packaging
036070.5055	250 pcs	box

Rack (PP) for 5 mm NMR-Tubes

retains 72 NMR-Tubes



Cat-No	Quantity	Packaging
036061.5025	1 pcs	bag

Sealing System for 5 mm NMR-Tubes

with High-Vacuum vent
and vacuum take off
including 2 shielded adapters



	Cat-No	Quantity	Packaging
for 203+ 228.5 mm Tubes	036059.5025	1 pcs	bag

Shielded Adapter for
5 mm NMR-Tubes
replacement part for
Cat-No 036059.5025



Cat-No	Quantity	Packaging
036060.5030	5 pcs	bag

Ampules / Bottles



Ampule

amber glass
according to ISO 9187



	Cat-No	Quantity	Packaging
1 ml	VP-01	525 pcs	box
10 ml	VP-02	240 pcs	box

Crimp top vial, 10 ml

amber glass



Cat-No	Quantity	Packaging
VP-03	100 pcs	box

Aluminium cap for crimp top vial

cap with PTFE/Silicon septum



Cat-No	Quantity	Packaging
VP-04	100 pcs	bag

Bottle

amber glass Class III, thread DIN 18



	Cat-No	Quantity	Packaging
10 ml	VP-05	279 pcs	bag
25 ml	VP-06	175 pcs	bag
50 ml	VP-07	105 pcs	bag
100 ml	VP-08	68 pcs	bag

Screw cap (HDPE) DIN 18

thread DIN 18
Teflon® faced liner included
color: red



Cat-No	Quantity	Packaging
VP-10	100 pcs	bag

Screw cap (HDPE) with hole and PTFE/silicon septum, DIN 18

thread DIN 18
for use with Cat-No VP-05 - VP-08
color: red



Cat-No	Quantity	Packaging
VP-31	100 pcs	bag

Laboratory bottle

square bottle, amber glass



	Cat-No	Quantity	Packaging
100 ml, thread DIN 32	VP-11	1 pcs	bag
250 ml, thread DIN 32	VP-12	1 pcs	bag
500 ml, thread DIN 32	VP-13	1 pcs	bag
1000 ml, thread DIN 45	VP-14	1 pcs	bag

Screw cap (PE)

PTFE seal included
color: red



	Cat-No	Quantity	Packaging
thread DIN 32	VP-15	10 pcs	bag
thread DIN 45	VP-16	10 pcs	bag

General Terms and Conditions of Business Allgemeine Geschäftsbedingungen



General Provisions

Our products are intended for laboratory use only and are to be used exclusively by qualified specialist staff.

Our products will not be sold to private persons. Deliveries are only made to companies, universities and colleges.

ARMAR AG reserves the right to change prices, specifications, the sales program and General Terms and Conditions of Business (GTC) at any time.

Liability

ARMAR AG's liability is restricted to the replacement of the delivered products. We shall not be liable for claims based on negligence or improper storage.

The buyer is not entitled to claim for compensation in the event of delivery delay or stoppage.

Complaints must be made to ARMAR AG within 8 days from receipt of the delivery.

Labelling

All products are labelled with the product name and the quantity. With chemicals additionally the batch number is listed. Hazardous materials are marked with the according pictograms, UN-numbers, ADR-numbers, hazard and precautionary statements.

Material Safety Data Sheets (MSDS)

On request Material Safety Data Sheets (MSDS) will be delivered. Online the MSDS are available on our webpage (<http://www.armor.ch/index.php?material-safety-data-sheets>).

Packaging

All ARMAR AG's packaging has been optimized to suit the property of its containing products.

Products sensitive to humidity are packed under Argon-protection atmosphere.

On request we can carry out special packaging. Should this concern small amounts, at least ten packages of the same containment amount must be obtained.

Quality check

Spot checks are carried out on all products in their sale packaging. They will only be given free for sale if all specifications are correct. The particular specifications are listed in this catalogue.

Certificates of Analysis (CoA)

On request Certificates of Analysis (CoA) of the delivered batch numbers can be issued.

Durability

We guarantee following durability on unopened packaging that has been correctly stored.

Product	Packaging	Durability
Liquids	Bottle	5 years
Liquids	Ampoule	10 years
Solids	Bottle	5 years
Reference Standards	NMR-Tubes	5 years

Distribution and Insurance

All products are delivered according to the ADR, IATA and IMO guidelines. The transport insurance is covered by ARMAR AG.

On request we can organize the distribution according to our customer's particular wishes (INCOTERMS, haulage contractor).

Distribution Switzerland

Harmless products or hazardous products within the Limited Quantities (LQ) are delivered by DHLswisspack. Otherwise hazardous products are transported by road.

Value of goods	INCOTERMS	Freight charges
< CHF 300	EXW	CHF 15
≥ CHF 300	DDP	–

Distribution Europe

Harmless products are delivered by DHL (economy select) or post (PRIORITY MAIL). Hazardous products within the Limited Quantities (LQ) are delivered by DHL (economy select). Otherwise hazardous products are transported by road.

Value of goods	Products	INCOTERMS	Freight charges
< CHF 500	Harmless products or LQ	EXW	CHF 60
≥ CHF 500	Harmless products or LQ	DAP	–
< CHF 2000	Hazardous products	EXW	CHF 200
≥ CHF 2000	Hazardous products	DAP	–

Distribution worldwide

Harmless products are delivered by post (PRIORITY MAIL) or air. Hazardous products are delivered by air or sea.

Value of goods	INCOTERMS	Freight charges
< CHF 5000	EXW	actual freight costs
≥ CHF 5000	CIF	–

Export license

NMR-Solvents, Deuterium oxide and Deuterated Compounds (tariff codes 2845.1000 and 2845.9090) require an export license. ARMAR AG holds a general export license, which is valid for most countries. Otherwise a special authorisation must be requested from SECO (State Secretariat for Economic Affairs). The application for this permission requires following documents:

1. Official order
2. Company profile
3. Original signed and stamped Statement of End-Use (ES).

Upon receipt of all the documents the approval proceedings will take 1 to 2 weeks.

Prices

The updated and valid prices (CHF, EUR and USD), inclusive packaging, exclusive of statutory value-added tax and freight charges, are listed in ARMAR's webshop (<http://shop.armar.ch/>).

Discount

Following quantity discounts are granted on bulk orders of the same catalogue number.

Quantity	Discount
10–19	5%
≥ 20	10%

Offers

We make offers for bulk orders and yearly contracts.

Our offers have a validity of 30 days if no other terms have been agreed on.

An optional sale of these products in the interim is kept open from our side.

Terms of payment

Payments are due within 30 days of the invoice date.

When dealing with new clients or customers with outstanding payments we reserve the right to deliver the products upon advance payment.

Jurisdiction

The place of performance for all obligations arising from the contractual relationship is Zuzach (Switzerland).

Allgemeines

Unsere Produkte sind nur für den Laboreinsatz vorgesehen und dürfen nur von qualifiziertem Fachpersonal verwendet werden.

Die Produkte werden nicht an Privatpersonen verkauft. Der Versand erfolgt nur an Firmen, Universitäten und Hochschulen.

ARMAR AG behält sich jederzeit vor, die Preise, die Produktspezifikationen, das Verkaufsangebot und die Allgemeinen Geschäftsbedingungen (AGB) zu ändern.

Haftung

Die Haftung von ARMAR AG beschränkt sich auf den Ersatz der gelieferten Produkte. Bei unzumutbarer Anwendung oder unsachgemässer Lagerung wird jede Haftung abgelehnt.

Bei Lieferverzug oder Lieferunterbruch kann kein Schadenersatz von Seiten des Käufers geltend gemacht werden.

Beanstandungen sind innerhalb von 8 Tagen nach Erhalt der Ware bei ARMAR AG vorzubringen.

Kennzeichnung

Alle Produkte sind etikettiert und mit dem Produktnamen und der Menge beschriftet. Bei Chemikalien ist zusätzlich die Batchnummer aufgeführt. Gefahrgutprodukte sind mit den entsprechenden Gefahrenpiktogrammen, UN-Nummern, ADR-Nummern, Gefahren- und Sicherheitshinweisen gekennzeichnet.

Sicherheitsdatenblätter (MSDS)

Auf Anfrage werden Sicherheitsdatenblätter (MSDS, Material Safety Data Sheets) zugestellt. Online sind die MSDS auf unserer Webseite (<http://www.armar.ch/index.php?sicherheitsdatenblaetter>) verfügbar.

Verpackung

Die Verpackungen sind von ARMAR AG auf die Produktverträglichkeit geprüft.

Alle feuchtigkeitsempfindlichen Produkte werden unter Argon-Schutzatmosphäre abgefüllt.

Auf Anfrage können wir Sonderabfüllungen vornehmen. Sofern es sich dabei um Kleinpackungen handelt, müssen mindestens zehn Packungen pro Abfüllmenge bezogen werden.

Qualitätskontrolle

Alle Produkte werden stichprobenweise in der Verkaufsverpackung analysiert und nach Einhaltung der Spezifikationen zum Verkauf freigegeben. Die Spezifikationen sind aus dem Katalog ersichtlich.

Analysenzertifikate (CoA)

Auf Anfrage werden Analysenzertifikate (CoA, Certificate of Analysis) der gelieferten Batchnummern ausgestellt.

Haltbarkeit

Auf ungeöffnete Verpackungen bei sachgemässer Lagerung garantieren wir folgende Haltbarkeiten.

Produkt	Verpackung	Haltbarkeit
Flüssigkeit	Flasche	5 Jahre
Flüssigkeit	Ampulle	10 Jahre
Feststoff	Flasche	5 Jahre
Referenzstandard	NMR-Tube	5 Jahre

Versand und Versicherung

Alle Produkte werden unter Einhaltung der ADR-, IATA- und IMO-Regulationen ausgeliefert. Die Transportversicherung wird von ARMAR AG gedeckt. Auf Anfrage sind wir in der Lage, den Versand nach Kundenwunsch (INCOTERMS, Speditionsfirma) auszuführen.

Versand Schweiz

Bei ungefährlichen Produkten oder Gefahrgut innerhalb der limitierten Menge (LQ, Limited Quantities) erfolgt der Versand per DHLswisspack. Ansonsten erfolgt der Gefahrguttransport per Strasse.

Warenwert	INCOTERMS	Frachtkosten
< CHF 300	EXW	CHF 15
≥ CHF 300	DDP	–

Versand Europa

Bei ungefährlichen Produkten erfolgt der Transport per DHL (economy select) oder Post (PRIORTIY MAIL). Gefahrgut innerhalb der limitierten Menge (LQ, Limited Quantities) wird mit DHL (economy select) ausgeliefert. Ansonsten erfolgt der Gefahrguttransport per Strasse.

Warenwert	Produkt	INCOTERMS	Frachtkosten
< CHF 500	kein Gefahrgut oder LQ	EXW	CHF 60
≥ CHF 500	kein Gefahrgut oder LQ	DAP	–
< CHF 2000	Gefahrgut	EXW	CHF 200
≥ CHF 2000	Gefahrgut	DAP	–

Versand Weltweit

Bei ungefährlichen Produkten erfolgt der Transport per Post (PRIORTIY MAIL) oder Luftfracht. Gefahrgut wird als Luft- oder Seefracht ausgeliefert.

Warenwert	INCOTERMS	Frachtkosten
< CHF 5000	EXW	effektive Frachtkosten
≥ CHF 5000	CIF	–

Export-Bewilligung

NMR-Lösungsmittel, Deuteriumoxid und deuterierte Verbindungen (Zolltarife 2845.1000 und 2845.9090) benötigen eine Ausfuhrbewilligung. ARMAR AG besitzt eine generelle Ausfuhrbewilligung, welche für die meisten Länder Gültigkeit hat. Ansonsten muss eine Einzelbewilligung beim SECO (Staatssekretariat für Wirtschaft) angefordert werden. Für den Bewilligungsantrag benötigen wir folgende Dokumente:

1. Offizielle Bestellung
2. Firmenprofil
3. Eine original unterschriebene und abgestempelte Endverbrauchererklärung (ES Statement of End-Use).

Nach Erhalt aller Unterlagen dauert das Bewilligungsverfahren 1 bis 2 Wochen.

Preise

Die aktuellen und gültigen Preise (CHF, EUR und USD), inklusiv Verpackung, exklusiv der gesetzlichen Mehrwertsteuer und der Transportkosten, sind im ARMAR-Webshop (<http://shop.armar.ch/>) aufgeführt.

Rabatt

Bei grösseren Bezügen der gleichen Katalognummer gewähren wir folgende Mengenrabatte.

Menge	Rabatt
10–19	5%
≥ 20	10%

Offerten

Für Bulkmenen und Jahreskontrakte unterbreiten wir Offerten. Sofern nicht anders vereinbart, haben die Offerten eine Gültigkeit von 30 Tagen. Ein allfälliger Zwischenverkauf der Produkte ist freibleibend.

Zahlungsbedingungen

30 Tage nach Rechnungsdatum.
Bei allfälligen Neukunden und bei Kunden mit ausstehenden, fälligen Zahlungen behalten wir uns vor, die Produkte gegen Vorauszahlung zu liefern.

Gerichtsstand

Für alle sich aus dem Vertragsverhältnis ergebenden Streitigkeiten ist der Gerichtsstand Zuzach (Schweiz) zuständig.

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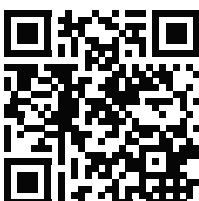
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our local distributor



2013/10'