



Chemicals TOP Offers



-15%

Osmolality Standards ROTI®Calipure

Osmometry uses osmotic pressure to determine concentration. The osmotic pressure of a solution depends on the temperature and the number of particles dissolved in it.

This colligative property can be done by determining the freezing point depression and thus the osmotic value can be determined indirectly.

Our osmolality standards are made from high purity sodium chloride and deionised water and filtered through 0.22 µm membrane. They can be used for calibration with all osmometers and are traceable to SRM from NIST.

The batch-specific certificates of analysis are available online.



Standards for Osmolality ROTI®Calipure 300 mOsm/kg H₂O

Art. No.	Pack Qty.	Pack.	DKK	DKK
216A.1	10 ml	glass ampoule	483,00	410,25

Standards for Osmolality ROTI®Calipure 850 mOsm/kg H₂O

Art. No.	Pack Qty.	Pack.	DKK	DKK
216C.1	10 ml	glass ampoule	483,00	410,25

Standards for Osmolality ROTI®Calipure 100, 300, 500, 850, 2000 mOsm/kg H₂O, linearity set with 2 ampoules each

Art. No.	Pack Qty.	Pack.	DKK	DKK
216E.1	10 ml	glass ampoule	523,50	444,40

Calibration & Control Standards ROTI®Calipure

Refractive Index Standards ROTI®Calipure

-15%

Our refractive index standards are manufactured from high-quality reagents. They can be used with all refractometers. They are solvent based and are supplied in bottles with an additional pipette. The batch specific certificates of analysis are available online.

Purity	Pack.	Art. No.	Pack Qty.	DKK	DKK
1,38779 (20 °C)	glass	3100.1	15 ml	1.282,15	1.089,40
1,40485 (20 °C)	glass	3102.1	15 ml	2.217,40	1.884,40
1,42345 (20 °C)	glass	3103.1	15 ml	1.282,15	1.089,40
1,44468 (20 °C)	glass	3106.1	15 ml	1.282,15	1.089,40
1,46768 (20 °C)	glass	3120.1	15 ml	1.282,15	1.089,40
1,49672 (20 °C)	glass	3124.1	15 ml	1.282,15	1.089,40
1,50044 (20 °C)	glass	3125.1	15 ml	1.282,15	1.089,40
1,51726 (20 °C)	glass	3126.1	15 ml	1.282,15	1.089,40
1,53660 (20 °C)	glass	3143.1	15 ml	1.282,15	1.089,40
1,65808 (20 °C)	glass	3152.1	15 ml	2.136,75	1.815,75



For safety information and additional data, see our current catalogue or at www.carlroth.com

Standards for Cryoscopy ROTI®Calipure

-15%

The concentration of a solute in a liquid, has an influence on some colligative properties of the mixed solution, one of the properties is the freezing point. The freezing point of milk is also based on this phenomenon and is below 0 °C for unaltered milk. If the milk is diluted with water, the freezing point moves closer to that of pure water (0 °C). The increase in freezing point is due to the dilution of lactose and inorganic salts, the other components such as fat, proteins and other ingredients probably have no influence on the freezing point.

The freezing point standards are produced gravimetrically (w/w) from high-quality raw materials. The certificates of analysis are available online.

Properties:

- Used to calibrate and control
- Suitable for all cryoscopes
- For the determination of freezing point in milk
- Manufactured according to ISO 5764



Product name	Brand/Purity	Pack.	Art. No.	Pack Qty.	DKK	DKK
Standard for cryoscopy	ROTI®Calipure 000 (0,000 °C)	plastic	1PEX.1	250 ml	330,00	280,15
	ROTI®Calipure 422 m°H (-0,408 °C)	plastic	1PEY.1	100 ml	229,90	195,00
			1PEY.2	250 ml	330,00	280,15
	ROTI®Calipure 530 m°H (-0,512 °C)	plastic	1PH0.1	100 ml	229,90	195,00
			1PH0.2	250 ml	330,00	280,15
	ROTI®Calipure 577 m°H (-0,557 °C)	plastic	1PH1.1	250 ml	330,00	280,15
Standard for cryoscopy – Cooling Bath Liquid	ROTI®Calipure for cryoscopy		1PH2.1	100 ml	229,90	195,00
			1PH2.2	250 ml	330,00	280,15
Standard for cryoscopy – Heat Transfer Fluid	ROTI®Calipure for cryoscopy	plastic	1PH3.1	500 ml	362,25	307,50
		plastic	1PH4.1	250 ml	531,40	451,50

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Solvents for Analysis

-20%

Acetone

ROTIPURAN® ≥99,8 %, p.a., ACS, ISO

Danger H225-H319-H336-EUH066

Art. No.	Pack Qty.	Pack.	DKK	DKK
9372.1	1 l	glass	270,40	216,00
9372.4	1 l	plastic	246,00	196,50
9372.2	2.5 l	glass	563,65	450,40
9372.5	2.5 l	plastic	531,40	424,90
9372.6	5 l	plastic	907,15	725,65
9372.7	10 l	PE/steel	1.524,00	1.218,75
9372.3	25 l	tinplate	2.781,75	2.225,25

Acetic acid ethyl ester

ROTIPURAN® ≥99,5 %, p.a., ACS, ISO

Danger H225-H319-H336-EUH066

Art. No.	Pack Qty.	Pack.	DKK	DKK
6784.1	1 l	glass	337,90	270,00
6784.3	1 l	plastic	313,90	250,50
6784.2	2.5 l	glass	604,15	482,65
6784.4	2.5 l	plastic	584,65	467,65
6784.5	5 l	plastic	959,65	767,25
6784.6	10 l	plastic	1.653,00	1.322,25
6784.7	25 l	plastic	3.297,75	2.637,75

1-Butanol

ROTIPURAN® ≥99,4 %, p.a., ACS

Danger

H226-H302-H315-H318-H335-H336

Art. No.	Pack Qty.	Pack.	DKK	DKK
7171.2	1 l	glass	555,75	444,00
7171.1	2.5 l	glass	1.088,65	870,75
7171.3	5 l	plastic	1.846,50	1.476,75
7171.4	10 l	plastic	3.297,75	2.637,75
7171.5	25 l	plastic	6.409,90	5.127,75

Cyclohexane

ROTIPURAN® ≥99,5 %, p.a., ACS, ISO

Danger

H225-H304-H315-H336-H410

Art. No.	Pack Qty.	Pack.	DKK	DKK
6886.1	1 l	glass	620,25	495,75
6886.2	2.5 l	glass	1.282,15	1.025,25
6886.3	5 l	aluminium	2.217,40	1.773,75
6886.4	10 l	tinplate	3.790,90	2.960,25
6886.5	25 l	tinplate	7.377,40	5.901,75

Dichloromethane

ROTIPURAN® ≥99,5 %, p.a., ACS, ISO

Warning H315-H319-H336-H351

Art. No.	Pack Qty.	Pack.	DKK	DKK
6053.3	100 ml	glass	152,65	121,50
6053.1	1 l	glass	410,65	328,15
6053.2	2.5 l	glass	765,40	611,65
6053.4	10 l	tinplate	1.975,50	1.580,25
6053.5	25 l	tinplate	3.862,15	3.089,25

Diethyl ether

ROTIPURAN® ≥99,5 %, p.a., stabilised

Danger

H224-H302-H336-EUH019 EUH066

Art. No.	Pack Qty.	Pack.	DKK	DKK
3942.1	1 l	glass	463,90	370,90
3942.6	2.5 l	glass	826,50	661,15
3942.4	5 l	aluminium	1.572,40	1.257,75
3942.5	25 l	tinplate	4.716,75	3.773,25

Dimethyl sulphoxide (DMSO)

ROTIPURAN® ≥99,8 %, p.a.

Art. No.	Pack Qty.	Pack.	DKK	DKK
4720.4	100 ml	glass	197,65	157,90
4720.2	500 ml	glass	370,15	295,90
4720.1	1 l	glass	628,15	502,15
4720.3	2.5 l	glass	1.282,15	1.025,25
4720.5	5 l	plastic	2.652,75	2.121,75
4720.6	10 l	plastic	5.071,50	4.056,75
4720.7	25 l	plastic	12.085,90	9.668,25

Ethanol*

ROTIPURAN® ≥99,8 %, p.a.

Danger H225-H319

Art. No.	Pack Qty.	Pack.	DKK	DKK
9065.1	1 l	glass	862,15	689,25
9065.3	1 l	plastic	846,75	677,25
9065.2	2.5 l	glass	1.753,90	1.402,90
9065.4	2.5 l	plastic	1.733,65	1.386,75
9065.5	5 l	plastic	3.104,25	2.483,25
9065.7	10 l	plastic	5.119,90	4.095,75
9065.6	25 l	tinplate	10.634,65	8.507,25
9065.8	25 l	plastic	10.441,15	8.352,75

*Prices include German tax on alcohol

Ethanol*

ROTIPURAN® ≥70 %, p.a.

Danger H225-H319

Art. No.	Pack Qty.	Pack.	DKK	DKK
T868.1	1 l	plastic	584,65	467,65
T868.2	2.5 l	plastic	1.282,15	1.025,25
T868.3	5 l	plastic	2.378,65	1.902,75
T868.4	10 l	plastic	4.345,90	3.476,25
T868.5	25 l	plastic	8.667,40	6.933,75

*Prices include German tax on alcohol

Isooctane

ROTIPURAN® ≥99 %, p.a., ACS

Danger

H225-H304-H315-H336-H410

Art. No.	Pack Qty.	Pack.	DKK	DKK
6889.1	1 l	glass	579,75	463,50
6889.2	2.5 l	glass	1.240,90	999,75

Methanol

ROTIPURAN® ≥99,9 %, p.a., ACS, ISO

Danger

H225-H301+H311+H331-H370

Art. No.	Pack Qty.	Pack.	DKK	DKK
4627.1	1 l	glass	257,25	205,50
4627.4	1 l	plastic	241,15	192,40
4627.2	2.5 l	glass	450,75	360,40
4627.5	2.5 l	plastic	431,65	345,00
4627.6	5 l	plastic	895,50	716,25
4627.3	25 l	tinplate	1.814,25	1.451,25

Petroleum ether 40–60 °C

ROTIPURAN® p.a., ACS, ISO

Danger

H225-H304-H315-H336-H411

Art. No.	Pack Qty.	Pack.	DKK	DKK
T173.1	1 l	glass	415,50	331,90
T173.2	2.5 l	glass	846,75	677,25
T173.3	5 l	aluminium	1.524,00	1.218,75
T173.5	25 l	tinplate	5.361,75	4.289,25

2-Propanol

ROTIPURAN® ≥99,8 %, p.a., ACS, ISO

Danger H225-H319-H336

Art. No.	Pack Qty.	Pack.	DKK	DKK
6752.1	1 l	glass	305,65	244,15
6752.3	1 l	plastic	289,50	231,40
6752.2	2.5 l	glass	724,90	579,40
6752.4	2.5 l	plastic	708,75	566,65
6752.5	5 l	plastic	1.169,25	935,25
6752.7	10 l	PE/steel	2.056,15	1.644,75
6752.8	10 l	plastic	1.975,50	1.580,25
6752.6	25 l	tinplate	3.781,50	3.024,75
6752.9	25 l	plastic	3.668,65	2.934,75

Toluene

ROTIPURAN® ≥99,5 %, p.a., ACS, ISO

Danger

H225-H304-H315-H336-H361d-H373-H412

Art. No.	Pack Qty.	Pack.	DKK	DKK
7115.1	1 l	glass	383,25	306,40
7115.2	2.5 l	glass	757,15	605,25
7115.3	5 l	aluminium	1.088,65	870,75
7115.4	25 l	tinplate	3.346,15	2.676,75

Trichloromethane/Chloroform

ROTIPURAN® ≥99 %, p.a., stabilised with ethanol

Danger

H302-H315-H319-H331-H351-H361d-H372

Art. No.	Pack Qty.	Pack.	DKK	DKK
3313.4	100 ml	glass	176,65	141,00
3313.1	1 l	glass	523,50	418,15
3313.2	2.5 l	glass	1.040,25	831,75
3313.5	25 l	tinplate	3.922,40	3.137,75

Water

ROTIPURAN® p.a., ACS

Water ISO quality 2

Art. No.	Pack Qty.	Pack.	DKK	DKK
T172.1	1 l	plastic	104,25	82,90
T172.2	2.5 l	plastic	208,90	166,90
T172.3	5 l	plastic	390,00	263,65
T172.5	30 l	plastic	1.330,50	1.064,25

Xylene (isomers)

ROTIPURAN® ≥99 %, p.a., ACS, ISO

Danger H226-H304-H312+H332-H315-H319-H335-H373

Art. No.	Pack Qty.	Pack.	DKK	DKK
4436.1	1 l	glass	415,50	331,90
4436.2	2.5 l	glass	927,40	741,75
4436.3	5 l	aluminium	1.491,75	1.193,25
4436.4	10 l	tinplate	2.907,75	2.326,25
4436.7	25 l	tinplate	4.184,65	3.347,25

Acids & Bases for Analysis

-20%

Acids

Acetic acid

ROTIPURAN® 100 %, p.a.

Danger H226-H314

Art. No.	Pack Qty.	Pack.	DKK	DKK
3738.1	1 l	glass	270,40	216,00
3738.4	1 l	plastic	254,25	202,90
3738.2	2.5 l	glass	500,00	469,90
3738.5	2.5 l	plastic	571,90	457,15
3738.6	5 l	plastic	987,75	790,15
3738.3	10 l	plastic	1.765,90	1.412,25



Formic acid

ROTIPURAN® ≥98 %, p.a., ACS

Danger

H226-H290-H302-H314-H331-EUH071

Art. No.	Pack Qty.	Pack.	DKK	DKK
4724.3	500 ml	glass	238,15	190,15
4724.1	1 l	glass	442,90	353,65
4724.2	2.5 l	glass	879,00	702,75
4724.4	10 l	PE/steel	2.862,40	2.289,75
4724.5	25 l	PE/steel	5.797,15	4.637,25

Hydrochloric acid

ROTIPURAN® ≥32 %, p.a., ISO

Danger H290-H314-H335

Art. No.	Pack Qty.	Pack.	DKK	DKK
P074.1	1 l	glass	197,65	157,90
P074.3	1 l	plastic	181,50	145,15
P074.2	2.5 l	glass	354,00	282,75
P074.4	2.5 l	plastic	337,90	270,00
P074.5	10 l	plastic	979,90	783,40
P074.6	25 l	plastic	2.217,40	1.773,75

Nitric acid

ROTIPURAN® ≥65 %, p.a., ISO

Danger

H272-H290-H314-H331-EUH071

Art. No.	Pack Qty.	Pack.	DKK	DKK
6771.3	500 g	plastic	197,65	157,90
6771.1	1 kg	plastic	390,00	263,65
6771.4	2.5 kg	plastic	660,40	528,00
6771.2	5 kg	plastic	1.229,65	983,65
6771.6	10 kg	plastic	2.298,00	1.838,25
6771.5	25 kg	plastic	4.910,25	3.927,75

Bases

Ammonia solution

ROTIPURAN® ≥25 %, p.a.

Danger H290-H314-H335-H410

Art. No.	Pack Qty.	Pack.	DKK	DKK
6774.1	1 l	glass	238,15	190,15
6774.2	2.5 l	glass	354,00	282,75
6774.3	5 l	plastic	531,40	424,90

Potassium hydroxide

≥85 %, p.a., in pellets

Danger H290-H302-H314

Art. No.	Pack Qty.	Pack.	DKK	DKK
6751.3	250 g	plastic	157,50	125,65
6751.1	1 kg	plastic	318,75	254,65
6751.4	2.5 kg	plastic	644,25	514,90
6751.2	5 kg	plastic	1.201,50	960,75
6751.6	10 kg	plastic	2.169,00	1.734,75
6751.5	25 kg	plastic	4.345,90	3.476,25

Sodium hydroxide

≥98 %, p.a., ISO, in pellets

Danger H290-H314

Art. No.	Pack Qty.	Pack.	DKK	DKK
4989.3	250 ml	glass	184,90	147,40
4989.1	1 l	glass	334,90	267,40
4989.2	2.5 l	glass	689,65	551,25
4989.4	2.5 l	plastic	668,65	534,40

Sodium hydroxide solution

Purity	Art. No.	Pack Qty.	DKK	DKK
50 %, p.a.	22CY.1	1 l	321,75	256,90
	22CY.2	2.5 l	644,25	514,90
	22CY.3	5 l	1.120,90	896,25
	22CY.4	10 l	2.007,75	1.605,75
	22CY.5	25 l	4.910,25	3.927,75
45 %, p.a.	22E0.1	1 l	297,75	237,75
	22E0.2	2.5 l	592,90	474,00
	22E0.3	5 l	1.040,25	831,75
	22E0.4	10 l	1.846,50	1.476,75
	22E0.5	25 l	4.587,75	3.669,75
40 %, p.a.	22E1.1	1 l	273,40	218,25
	22E1.2	2.5 l	539,65	431,25
	22E1.3	5 l	959,65	767,25
	22E1.4	10 l	1.685,25	1.347,75
	22E1.5	25 l	4.152,40	3.321,75
≥32 %, p.a.	T196.1	1 l	294,40	235,15
	T196.2	2.5 l	563,65	450,40
	T196.3	5 l	903,00	722,25
	T196.7	25 l	3.426,75	2.741,25

Purity	Art. No.	Pack Qty.	DKK	DKK
25 %, p.a.	22E2.1	1 l	217,15	173,25
	22E2.2	2.5 l	410,65	328,15
	22E2.3	5 l	765,40	611,65
	22E2.4	10 l	1.282,15	1.025,25
	22E2.5	25 l	3.184,90	2.547,75
20 %, p.a.	22E3.1	1 l	208,90	166,90
	22E3.2	2.5 l	386,25	308,65
	22E3.3	5 l	708,75	566,65
	22E3.4	10 l	1.201,50	960,75
	22E3.5	25 l	2.975,25	2.379,75
10 %, p.a.	22E4.1	1 l	192,75	153,75
	22E4.2	2.5 l	362,25	289,15
	22E4.3	5 l	636,40	508,50
	22E4.4	10 l	1.040,25	831,75
	22E4.5	25 l	2.378,65	1.902,75
5 %, p.a.	22E5.1	1 l	184,90	147,40
	22E5.2	2.5 l	321,75	256,90
	22E5.3	5 l	563,65	450,40
	22E5.4	10 l	910,50	727,90
	22E5.5	25 l	2.088,40	1.670,25

For safety information and additional data, see our current catalogue or at www.carlroth.com



Determination of Nitrogen according to Kjeldahl

-20%

The most common technique for measuring the amount of nitrogen in organic matter is the Kjeldahl method, which is used in a wide range of sectors such as environmental analysis, food analysis, water analysis and agricultural analysis, as well as in the pharmaceutical and chemical industries.



Kjeldahl tablets

Product name	Purity	Art. No.	Pack Qty.	DKK	DKK
Kjeldahl tablets antifoam	tablet 1 g	8225.1	250 unit(s)	1.000,00	806,25
		8225.2	1,000 unit(s)	3.184,90	2.547,75
Kjeldahl tablets C	tablet 5,1 g	8241.1	250 unit(s)	1.169,25	935,25
		8241.2	1,000 unit(s)	3.620,25	2.895,75
Kjeldahl tablets CK	tablet 3,9 g	8243.1	250 unit(s)	1.169,25	935,25
		8243.2	1,000 unit(s)	3.620,25	2.895,75
Kjeldahl tablets CT	tablet 5,3 g	9637.1	250 unit(s)	1.169,25	935,25
		9637.2	1,000 unit(s)	3.620,25	2.895,75
Kjeldahl tablets CX	tablet 5,5 g	8236.1	250 unit(s)	1.169,25	935,25
		8236.2	1,000 unit(s)	3.620,25	2.895,75
Kjeldahl tablets (free of mercury and selenium)	tablet 5 g	HN19.1	250 unit(s)	1.362,75	1.089,75
		HN19.2	1,000 unit(s)	4.878,00	3.902,25
Kjeldahl tablets (free of mercury and selenium)	tablet 2,5 g	HN20.1	250 unit(s)	1.169,25	935,25
		HN20.2	1,000 unit(s)	3.620,25	2.895,75
Kjeldahl tablets (Missouri catalyst)	tablet 2,5 g	HN22.1	250 unit(s)	1.169,25	935,25
		HN22.2	1,000 unit(s)	3.620,25	2.895,75
Kjeldahl tablets ST	tablet 3,5 g	9693.1	250 unit(s)	1.169,25	935,25
		9693.2	1,000 unit(s)	3.620,25	2.895,75
Kjeldahl tablets TCT	tablet 3,71 g	9763.1	250 unit(s)	1.169,25	935,25
		9763.2	1,000 unit(s)	3.620,25	2.895,75
Kjeldahl tablets (Wieninger catalyst)	tablet 2,5 g	HN21.1	250 unit(s)	1.169,25	935,25
		HN21.2	1,000 unit(s)	3.620,25	2.895,75

For safety information and additional data, see our current catalogue or at www.carlroth.com

Composition of the Kjeldahl tablets:

Art. No.	Designation	Weight of tablet (g)	Typical composition						
			K ₂ SO ₄	Na ₂ SO ₄	CuSO ₄	CuSO ₄ • 5 H ₂ O	TiO ₂	Se	Anti-foam
HN19	Kjeldahl tablets (mercury and selenium-free)	5	23,10 %	69,30 %	1,80 %	–	2,80 %	–	–
HN20	Kjeldahl tablets (mercury and selenium-free)	2,5	23,10 %	69,30 %	1,80 %	–	2,80 %	–	–
HN21	Kjeldahl tablets (Wieninger catalyst)	2,5	–	96,25 %	1,50 %	–	–	1,50 %	–
HN22	Kjeldahl tablets (Missouri catalyst)	2,5	48,40 %	48,30 %	0,30 %	–	–	–	–
8225	Kjeldahl tablets, anti-foam	1	–	97,00 %	–	–	–	–	3,00 %
8236	Kjeldahl tablets CX	5,5	90,91%	–	–	9,09 %	–	–	–
8241	Kjeldahl tablets C	5,1	98,04 %	–	–	1,96 %	–	–	–
8243	Kjeldahl tablets CK	3,9	89,74 %	–	–	10,26 %	–	–	–
9637	Kjeldahl tablets CT	5,3	94,34 %	–	–	2,83 %	2,83 %	–	–
9693	Kjeldahl tablets ST	3,5	99,90 %	–	–	–	–	0,10 %	–
9763	Kjeldahl tablets TCT	3,71	94,34 %	–	–	2,83 %	2,83 %	–	–

Note: 8225 Kjeldahl anti-foam tablets do not contain a catalyst.
Please use additional Kjeldahl tablet with catalyst.



Multi Element Standards for ICP-OES

Multi Element Standards for MISA-ICP-OES

-15%

In support of the MISA programme

MISA (Metals and Inorganics Sectoral Approach) is a collaborative programme launched by ECHA and Eurometaux, the European non-ferrous metals association, to further develop open technical and scientific questions specific to the metals and inorganics sectors, while continuing to improve registration dossiers in these sectors.

Product name	Number of elements	Composition	Conc. info	Matrix	Art. No.	Pack Qty.	DKK	DKK
MISA ICP-OES Standard 1-Rare Earth Metals	18	Ce, Dy, Er, Eu, Gd, Ho, La, Lu, Nd, Pr, Sc, Sm, Tb, Th, Tm, U, Y, Yb	100 mg/l	5 % HNO ₃	1YP2.1	100 ml	1.927,15	1.637,65
MISA ICP-OES Standard 2-Precious Metals	6	Au, Ir, Pd, Pt, Rh, Ru	100 mg/l	10 % HCl	1YP3.1	100 ml	1.443,40	1.226,65
MISA ICP-OES Standard 3-Alkali, Alkaline Earth, Non-Transition Group	16	Al, As, Ba, Bi, Be, Ca, Cs, Ga, In, K, Li, Mg, Na, Rb, Se, Sr	100 mg/l	10 % HNO ₃	1YT2.1	100 ml	1.330,50	1.130,65
MISA ICP-OES Standard 4-Fluoride soluble group	15	B, Ge, Hf, Mo, Nb, P, Re, S, Sb, Si, Sn, Ta, Ti, W, Zr	100 mg/l	5 % HNO ₃ + tr% HF	24Y8.1	100 ml	1.491,75	1.267,50
MISA ICP-OES Standard 5-Transition metals	13	Ag, Cd, Co, Cr, Cu, Fe, Hg, Mn, Ni, Pb, Ti, V, Zn	100 mg/l	10 % HNO ₃	24Y9.1	100 ml	1.411,15	1.199,25

For safety information and additional data, see our current catalogue or at www.carlroth.com

ROTI®Star Nitric Acid Blanks

-15%

The diluted high purity nitric acids are excellent for performing blank value determinations in AAS, ICP-OES and ICP-MS. They can also be used to dilute the samples.

Properties:

- produced by subboiling distillation
- water used with a conductivity of max. 0.055 µS/cm at 25 °C, at the time of manufacturing
- filtered through 0.2 µm membrane

Nitric acid

ROTI®Star 5 %

 **Danger** H290-H314-EUH071

Art. No.	Pack Qty.	Pack.	DKK	DKK
23PX.1	500 ml	LDPE	466,90	396,40
23PX.2	1 l	LDPE	644,25	547,15

Nitric acid

ROTI®Star 0,5 %

Art. No.	Pack Qty.	Pack.	DKK	DKK
23PY.1	500 ml	LDPE	466,90	396,40
23PY.2	1 l	LDPE	644,25	547,15

ROTI®Star Mineral Oil Blanks

-15%

For mixing and preparing calibration standards for the spectrometric analysis of metals in hydrocarbon/petrochemical samples.

Mineral oil Blank

ROTI®Star 75 cSt

 **Danger** H304

Art. No.	Pack Qty.	Pack.	DKK	DKK
25T6.1	500 ml	plastic	692,65	588,40

Mineral oil Blank

ROTI®Star 20 cSt

 **Danger** H304

Art. No.	Pack Qty.	Pack.	DKK	DKK
25T7.1	500 ml	plastic	644,25	547,15



Element Standards for ICP-MS (Inductively Coupled Plasma – Mass Spectrometry)

The solutions and mixtures are made using materials of the highest purity, and therefore meet the requirements for instrumental analysis by AAS and ICP. All solutions are certified and can be traced to NIST standard reference solutions (excluded: iridium, osmium and ruthenium). Solutions are produced according to **ISO 17034** in an accredited environment. The solutions are tested in a laboratory accredited to **ISO/IEC 17025** and supplied with a detailed, batch-specific certificate of analysis.

Each standard solution is made of high purity starting materials (mostly $\geq 99,999\%$), and its content is determined gravimetrically and by ICP. High quality acids (purified by subboiling distillation) and water are used for production of the solutions. This gives you first-class reference materials of the highest purity and quality.

- Up to 70 measured trace impurities in the ppt range
- Up to 36 months shelf life on the unopened bottles

-15%



Product name	Element	Purity	Conc.	Matrix	Art. No.	Pack Qty.	DKK	DKK
Mercury ICP-MS Standard Solution	Mercury (Hg)	10 mg/l Hg, in 5 % HNO ₃	10 mg/l	5 % HNO ₃	5017.1	100 ml	579,75	492,40
Rhodium ICP-MS Standard Solution	Rhodium (Rh)	100 mg/l Rh, in 2 % HCl	100 mg/l	2 % HCl	22HC.1	100 ml	1.362,75	1.158,00
Yttrium ICP-MS Standard Solution	Yttrium (Y)	100 mg/l Y, in 2 % HNO ₃	100 mg/l	2 % HNO ₃	25KL.1	100 ml	483,00	410,25

For safety information and additional data, see our current catalogue or at www.carlroth.com

Multi Element Standards

-15%

Product name	Number of elements	Composition	Conc. info	Matrix	Art. No.	Pack Qty.	DKK	DKK
ICP-MS Calibration Standard Solution	5	Ca, Fe, K, Mg, Na	1000 mg/l	2 % HNO ₃	0409.1	100 ml	2.652,75	2.254,50
	8	Ge, Hf, Mo, Sb, Sn, Te, W, Zr	10 mg/l	2 % HNO ₃ + 0,1 % HF	6816.1 6816.2	100 ml 500 ml	2.330,25 1.894,90	1.980,40 1.610,25
ICP-MS Tuning Solution	5	Ce, Co, Li, Tl, Y	10 mg/l	2 % HNO ₃	6819.1	100 ml	879,00	747,00
	6	Ce, Co, Li, Mg, Tl, Y	1 µg/l	2 % HNO ₃	6806.1 6806.2	100 ml 500 ml	1.201,50 2.217,40	1.021,15 1.884,40
ICP-MS Tuning Solution A	6	Be (10), Bi (2), Ce (2), Co (5), In (2), Mn (5)	concentration in µg/l	1 % HNO ₃	0900.2	250 ml	2.459,25	2.089,90
ICP-MS Tuning Solution B	6	Be (1000), Bi (200), Ce (200), Co (500), In (200), Mn (500)	concentration in µg/l	1 % HNO ₃	0902.1	100 ml	1.765,90	1.500,75
ICP-MS Interference Check Solution A – 6020	12	Cl ⁻ (20000), Ca (3000), Fe (2500), Na (2500), C (2000), Al (1000), Mg (1000), P (1000), K (1000), S (1000), Mo (20), Ti (20)	concentration in µg/l	5 % HNO ₃	6808.1	100 ml	2.943,00	2.501,25

For safety information and additional data, see our current catalogue or at www.carlroth.com

► Further multi element standard solutions for ICP-MS in our current catalogue or at www.carlroth.com

Mycotoxins

Isotope-Labeled Mycotoxins as Standards

-15%

Mycotoxins are secondary metabolic products formed by fungi. They are therefore also described as mold toxins. Based on similar molecular structures and the producing mold genus, they can be classified into different groups, such as aflatoxins (*Aspergillus flavus*) or fumonisins (*Fusarium verticillioides*). These mycotoxins are often present in agricultural products and foodstuffs, which can cause serious chronic illnesses and acute poisoning (mycotoxicosis) if consumed. In order to regulate this, limit values have been introduced in many countries, which means that food must be regularly tested for contamination.

For precise analysis of your samples, we offer ^{13}C isotope-labeled mycotoxins as standards for the most common mold toxins.

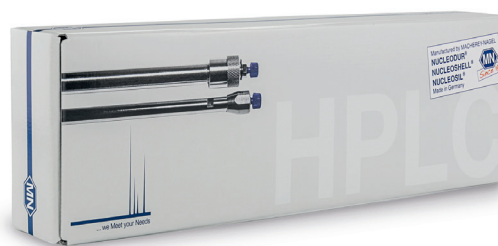


Structural formula	Product name	Purity	Art. No.	Pack Qty.	DKK	DKK
	$^{13}\text{C}_{17}$ -Aflatoxin B1	0.5 µg/ml in acetonitrile	25X1.1	1.2 ml	15.318,75	13.020,75
	$^{13}\text{C}_{17}$ -Aflatoxin B2	0.5 µg/ml in acetonitrile	25X2.1	1.2 ml	15.318,75	13.020,75
	$^{13}\text{C}_{17}$ -Aflatoxin G1	0.5 µg/ml in acetonitrile	25X3.1	1.2 ml	15.318,75	13.020,75
	$^{13}\text{C}_{17}$ -Aflatoxin G2	0.5 µg/ml in acetonitrile	25X4.1	1.2 ml	15.318,75	13.020,75
	$^{13}\text{C}_{17}$ -Aflatoxin M1	0.5 µg/ml in acetonitrile	25X5.1	1.2 ml	15.318,75	13.020,75
	$^{13}\text{C}_{15}$ -Deoxynivalenol	25 µg/ml in acetonitrile	25XC.1	1.2 ml	15.318,75	13.020,75
	$^{13}\text{C}_{34}$ -Fumonisin B1	25 µg/ml in acetonitrile/water (1:1)	25X7.1	1.2 ml	12.327,75	10.478,25
	$^{13}\text{C}_{34}$ -Fumonisin B2	10 µg/ml in acetonitrile/water (1:1)	25X8.1	1.2 ml	16.125,00	13.706,25
	$^{13}\text{C}_{34}$ -Fumonisin B3	10 µg/ml in acetonitrile/water (1:1)	25X9.1	1.2 ml	16.125,00	13.706,25
	$^{13}\text{C}_{22}$ -HT-2 Toxin	25 µg/ml in acetonitrile	25XL.1	1.2 ml	15.318,75	13.020,75
	$^{13}\text{C}_{20}$ -Ochratoxin	10 µg/ml in acetonitrile	25X6.1	1.2 ml	12.327,75	10.478,25
	$^{13}\text{C}_{24}$ -T-2 Toxin	25 µg/ml in acetonitrile	25XK.1	1.2 ml	15.318,75	13.020,75
	$^{13}\text{C}_{18}$ -Zearalenone	25 µg/ml in acetonitrile	25XA.1	1.2 ml	15.318,75	13.020,75

For safety information and additional data, see our current catalogue or at www.carlroth.com



HPLC

-15%**HPLC column NUCLEODUR® 300-5 C₁₈ ec 5 µm**

Macherey-Nagel.

Standard RP phase with wide pores (300 Å) for separation of biomolecules in analytical columns. This octadecyl modification is based on high purity NUCLEODUR® silica gel.

Particle size (µm)	Column length (mm)	Column inner diameter (mm)	Art. No.	Pack Qty.	DKK	DKK
5	100	4.6	26C2.1	1 unit(s)	2.797,50	2.556,00
5	150	2	26C3.1	1 unit(s)	3.105,00	2.836,90
5	150	4.6	26C4.1	1 unit(s)	2.797,50	2.556,00
5	250	4	26C5.1	1 unit(s)	3.225,00	2.946,75
5	250	4.6	26C6.1	1 unit(s)	3.405,00	3.111,00

► Discover many more HPLC columns in our webshop.

Column Protection System

Innovative and universal screw-on guard column holder system. Suitable for all analytical HPLC columns with 1/16" fittings.

- Ideal protection for your analytical main column → significant increase in column lifetime
- Minimised void volume → suitable also for ultra fast HPLC
- Special ferrules → pressure stability up to 1300 bar (18850 psi)
- Visual contamination check → in-time changing of the guard column
- Guard column length 4 mm, ID 2 mm (for main columns with 2 mm ID) or ID 3 mm (for main columns with 3, 4 and 4,6 mm ID)
- UNIVERSAL RP guard columns suitable for all HPLC columns under RP conditions

Contents of the column protection system:

- Cartridge holder (1 piece)
- Capillaries (2 pieces)
- Ferrules (3 pieces)
- Wrenches (2 pieces)
- Manual

**Column Protection System**

Macherey-Nagel.

Type	Art. No.	Pack Qty.	DKK	DKK
Column Protection System	6041.1	1 set	1.201,50	1.021,15

ROTISOLV® LC-MS-Eluent Mixtures**Properties:**

- *Ready-to-use* solvent blends for easy handling
- High chemical purity of the used raw material: HPLC solvents (≥99.9 %) and acids (≥99.9 %)
- High accuracy of the ratio of ingredients
- High UV-permeability
- Trace elements: ≤0.05 ppm per element
- LC-MS suitability tested
- Filtered through 0.2 µm membrane
- Bottled under inert gas

Product name	Purity	Pack.	Art. No.	Pack Qty.	DKK	DKK
Acetonitrile with 0.1 % formic acid	≥99,9 %, LC-MS Grade	glass	CP00.2	2.5 l	2.007,75	1.706,25
Acetonitrile with 0.1 % trifluoroacetic acid	≥99,9 %, LC-MS Grade	glass	CP02.1	1 l	907,15	770,65
			CP02.2	2.5 l	2.007,75	1.706,25
Water with 0.1 % formic acid	LC-MS Grade	glass	CP03.1	1 l	463,90	393,75
			CP03.2	2.5 l	879,00	747,00
Water with 0.1 % trifluoroacetic acid	LC-MS Grade	glass	CP05.2	2.5 l	879,00	747,00

For safety information and additional data, see our current catalogue or at www.carlroth.com

Peptide Synthesis PEPTIPURE®

Resins for Peptide Synthesis

-20%



2-Chlorotrityl chloride resin

PEPTIPURE® 100–200 mesh, 1 % DVB

Art. No.	Pack Qty.	Pack.	DKK	DKK
7405.1	5 g	plastic	765,40	611,65
7405.2	25 g	plastic	2.894,65	2.315,25

Rink amide resin

PEPTIPURE® 100–200 mesh, 1 % DVB

Art. No.	Pack Qty.	Pack.	DKK	DKK
7515.1	1 g	glass	390,00	263,65
7515.2	5 g	plastic	1.411,15	1.128,75

Sieber amide resin

PEPTIPURE® 100–200 mesh

Storage temperature: +4 °C

Art. No.	Pack Qty.	Pack.	DKK	DKK
7408.1	1 g	glass	798,40	638,25
7408.2	5 g	plastic	3.217,15	2.573,25

Wang resin

PEPTIPURE® 100–200 mesh, 1 % DVB

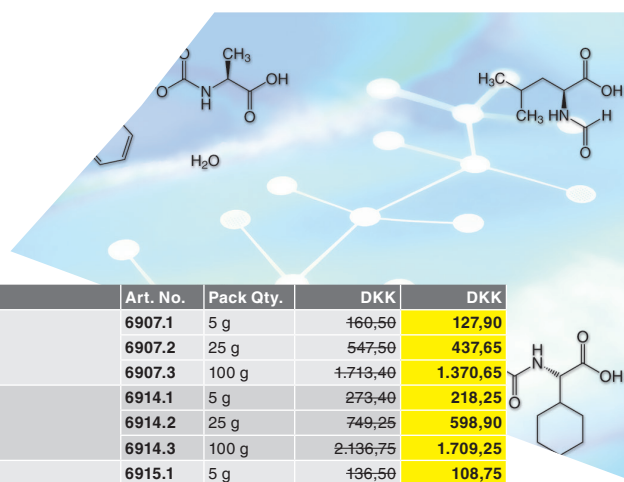
Storage temperature: +4 °C

Art. No.	Pack Qty.	Pack.	DKK	DKK
7506.1	1 g	glass	160,50	127,90
7506.2	5 g	plastic	402,40	321,40
7506.3	25 g	plastic	1.653,00	1.322,25

Protected Amino Acids

-20%

We supply protected amino acids of the highest quality and purity for standard applications in biochemistry and specifically for peptide synthesis.



Product name	Purity	Alternative name	Art. No.	Pack Qty.	DKK	DKK
Boc-L-Alanine	≥97 %, for biochemistry	Boc-L-Ala-OH	6907.1	5 g	160,50	127,90
			6907.2	25 g	547,50	437,65
			6907.3	100 g	1.713,40	1.370,65
Boc-L-Arginine hydrochloride monohydrate	≥98 %, for biochemistry	Boc-L-Arg-OH	6914.1	5 g	273,40	218,25
			6914.2	25 g	749,25	598,90
			6914.3	100 g	2.136,75	1.709,25
Boc-L-Asparagine	≥98 %, for biochemistry	Boc-L-Asn-OH	6915.1	5 g	196,50	108,75
			6915.2	25 g	991,15	312,75
			6915.3	100 g	1.282,15	1.025,25
Boc-L-Glutamic acid	≥99 %, for biochemistry	Boc-L-Gln-OH	6917.1	5 g	189,75	151,50
			6917.2	25 g	600,75	480,40
			6917.3	100 g	1.975,50	1.580,25
Boc-L-Glutamine	≥97 %, for biochemistry	Boc-L-Glu-OH	6916.1	5 g	160,50	127,90
			6916.2	25 g	547,50	437,65
			6916.3	100 g	1.713,40	1.370,65
Boc-Glycine	≥98 %, for biochemistry	Boc-Gly-OH	6918.1	5 g	117,00	93,40
			6918.2	25 g	318,75	254,65
			6918.3	100 g	1.008,00	806,25
Boc-L-Phenylalanine	≥99 %, for biochemistry	Boc-L-Phe-OH	6931.1	5 g	184,90	147,40
			6931.2	25 g	552,40	441,75
			6931.3	100 g	1.793,65	1.386,75
Fmoc-L-Alanine monohydrate	≥98 %, for biochemistry	Fmoc-L-Ala-OH	6646.1	10 g	181,50	145,15
			6646.2	50 g	599,65	431,25
			6646.3	250 g	2.136,75	1.709,25
			6646.4	500 g	4.071,75	3.257,25
			6646.5	1 kg	7.651,50	6.120,75
Fmoc-L-Arginine	≥98 %, for biochemistry	Fmoc-L-Arg-OH	6896.1	5 g	297,75	237,75
			6896.2	25 g	1.149,00	919,15
Fmoc-L-Asparagine	≥98,5 %, for biochemistry	Fmoc-L-Asn-OH	6897.1	5 g	165,40	132,00
			6897.2	25 g	499,15	399,00
			6897.3	100 g	1.604,65	1.283,25
Fmoc-L-Aspartic acid-(OtBu)	≥96 %, for biochemistry	Fmoc-L-Asp(OtBu)-OH	9654.1	5 g	222,00	177,40
			9654.2	25 g	665,25	532,15
			9654.3	100 g	2.136,75	1.709,25
Fmoc-L-Glutamine	≥98 %, for biochemistry	Fmoc-L-Gln-OH	6898.1	5 g	181,50	145,15
			6898.2	25 g	555,75	444,00
			6898.3	100 g	1.846,50	1.476,75
Fmoc-Glycine	≥99 %, for biochemistry	Fmoc-Gly-OH	6899.1	5 g	120,40	95,65
			6899.2	25 g	390,00	263,65
			6899.3	100 g	1.149,00	919,15

For safety information and additional data, see our current catalogue or at www.carlroth.com

► Further protected amino acids and protecting groups for peptide synthesis at www.carlroth.com



Peptide Synthesis PEPTIPURE®

-20%

Coupling Reagents

DCC PEPTIPURE® ≥98 %

Danger H302-H311-H317-H318

Art. No.	Pack Qty.	Pack.	DKK	DKK
4193.1	100 g	glass	189,75	151,50
4193.2	250 g	glass	383,25	306,40
4193.3	500 g	glass	668,65	534,40
4193.4	1 kg	glass	1.249,90	999,75
4193.5	2.5 kg	glass	2.652,75	2.121,75

DIC PEPTIPURE® ≥99 %

Danger
H226-H315-H317-H318-H330-H334-H410

Art. No.	Pack Qty.	Pack.	DKK	DKK
6981.1	5 ml	glass	184,90	147,40
6981.2	25 ml	glass	499,15	399,00
6981.3	100 ml	glass	1.411,15	1.128,75
6981.4	500 ml	glass	4.829,65	3.863,25

DIPEA PEPTIPURE® ≥99,5 %

Danger
H225-H302-H318-H331-H335

Art. No.	Pack Qty.	Pack.	DKK	DKK
2474.1	100 ml	glass	249,40	199,15
2474.2	250 ml	glass	450,75	360,40
2474.3	1 l	glass	1.524,00	1.218,75
2474.4	2.5 l	glass	3.136,50	2.508,75

DMAP PEPTIPURE® ≥99 %

Danger
H301+H331-H310-H315-H318-H370-H411

Art. No.	Pack Qty.	Pack.	DKK	DKK
6988.1	5 g	glass	136,50	108,75
6988.2	25 g	glass	265,50	211,90
6988.3	100 g	glass	805,50	643,90
6988.4	500 g	glass	2.814,00	2.250,75

EDC-HCl PEPTIPURE® ≥99 %

Storage temperature: -20 °C
Transport temperature: ambient temp.

Danger
H302-H311-H315-H317-H319-H373-H410

Art. No.	Pack Qty.	Pack.	DKK	DKK
2156.1	5 g	glass	225,00	179,65
2156.2	25 g	glass	641,25	512,65
2156.3	100 g	glass	1.894,90	1.515,75
2156.5	1 kg	glass	16.044,40	12.835,50

HATU PEPTIPURE® ≥99 %

Storage temperature: +4 °C

Danger H315-H317-H319-H334-H335

Art. No.	Pack Qty.	Pack.	DKK	DKK
2131.1	5 g	glass	523,50	418,15
2131.2	25 g	glass	1.927,15	1.541,25

PyBOP® PEPTIPURE® ≥98,5 %

Storage temperature: +4 °C

Warning H302-H317-H410

Art. No.	Pack Qty.	Pack.	DKK	DKK
2178.1	5 g	glass	297,75	237,75
2178.2	25 g	glass	907,15	725,65
2178.3	100 g	glass	2.652,75	2.121,75
2178.5	1 kg	glass	19.269,40	15.415,50



Reagents for Deprotection and Cleavage

HFIP PEPTIPURE® ≥99 %

Danger H314-H361fd-H373

Art. No.	Pack Qty.	Pack.	DKK	DKK
2473.1	10 ml	glass	410,65	328,15
2473.2	25 ml	glass	820,50	661,15
2473.3	100 ml	glass	2.975,25	2.379,75

Piperidine PEPTIPURE® ≥99,5 %

Danger
H225-H302-H311+H331-H314

Art. No.	Pack Qty.	Pack.	DKK	DKK
A122.1	200 ml	glass	318,75	254,65
A122.2	500 ml	glass	600,75	480,40
A122.3	1 l	glass	987,75	790,15
A122.4	2.5 l	glass	1.733,65	1.386,75

TFA PEPTIPURE® ≥99,9 %

Danger H290-H314-H332-H412

Art. No.	Pack Qty.	Pack.	DKK	DKK
P088.1	100 ml	glass	765,40	611,65
P088.2	500 ml	glass	3.620,25	2.895,75
P088.3	1 l	glass	6.280,90	5.024,25

Solvents

Dichloromethane PEPTIPURE® ≥99,9 %

Warning H315-H319-H336-H351

Art. No.	Pack Qty.	Pack.	DKK	DKK
P089.1	2.5 l	glass	657,40	525,40

DMF PEPTIPURE® ≥99,8 %

Danger
H226-H312+H332-H319-H360D

Art. No.	Pack Qty.	Pack.	DKK	DKK
A529.3	500 ml	glass	402,40	321,40
A529.1	2.5 l	glass	1.189,50	951,40
A529.7	10 l	plastic	2.007,75	1.605,75
A529.2	25 l	plastic	8.781,50	3.024,75

NMP PEPTIPURE® ≥99,8 %

Danger H315-H319-H335-H360D

Art. No.	Pack Qty.	Pack.	DKK	DKK
P052.1	2.5 l	glass	1.512,00	1.209,40



Accessories for Peptide Synthesis

-20%



Reactors for Peptide Synthesis

ROTH SELECTION. Material: PP, Fritte aus PE.

Volume (ml)	Art. No.	Pack Qty.	DKK	DKK
2	7926.2	10 unit(s)	88,15	70,15
2	7926.1	100 unit(s)	749,25	598,90
5	7927.2	10 unit(s)	112,15	89,25
5	7927.1	100 unit(s)	899,25	718,90
10	7944.2	10 unit(s)	128,25	102,40
10	7944.1	100 unit(s)	987,75	790,15
20	9261.2	10 unit(s)	149,25	119,25
20	9261.1	100 unit(s)	1.249,90	999,75

Frits for Reactors

ROTH SELECTION.

Suitable for	Version	Art. No.	Pack Qty.	DKK	DKK
2 ml reactors	PE	226H.1	100 unit(s)	563,65	450,40
5 ml reactors	PE	226K.1	100 unit(s)	879,00	702,75
10 ml reactors	PE	226L.1	100 unit(s)	1.088,65	870,75
20 ml reactors	PE	220N.1	100 unit(s)	1.088,65	870,75
2 ml reactors	PTFE	7946.1	100 unit(s)	802,50	641,65
5 ml reactors	PTFE	7960.1	100 unit(s)	879,00	702,75
10 ml reactors	PTFE	7962.1	100 unit(s)	1.040,25	831,75

Luer Stop Caps for Reactors

ROTH SELECTION.



Suitable for	Art. No.	Pack Qty.	DKK	DKK
Luer (male)	1Y23.1	10 unit(s)	100,00	80,65
Luer (male)	1Y23.2	100 unit(s)	741,00	592,50



-30%

Shaker Orbital digital

Heathrow Scientific.

- Circular movement
- Plates, petri dishes, glass flasks and culture bottles can be secured flexibly using elastic bands
- Digital display of speed and operating time
- Electronic speed control with soft start-up
- Loading options: e.g. 9 x 250 ml Erlenmeyer flasks or 4 x 500 ml Erlenmeyer flasks or 4 x 1000 ml Erlenmeyer flasks or 16 x 250 ml beakers or 4 x 1000 ml beakers
- 5 years warranty

Technical specifications:

Art. No.	PY67.1
Type	Digital orbital shaker
Movement type	circular
Speed range	20 to 300 rpm
Shaking amplitude (stroke)	19 mm
Timer	1 min to 49 h or continuous operation
Shaking surface area	279 x 279 mm
W x D x H	314 x 312 x 197 mm
Loading capacity	4.5 kg
Permissible ambient conditions	+2 to +40 °C at 80% RH
Mains connection	100-240 V, 50/60 Hz

Delivery incl. platform with rubber mat and 8 elastic bands.

Type	Art. No.	Pack Qty.	DKK	DKK
Digital orbital shaker	PY67.1	1 unit(s)	8.110,90	5.677,50

FRISENETTE



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