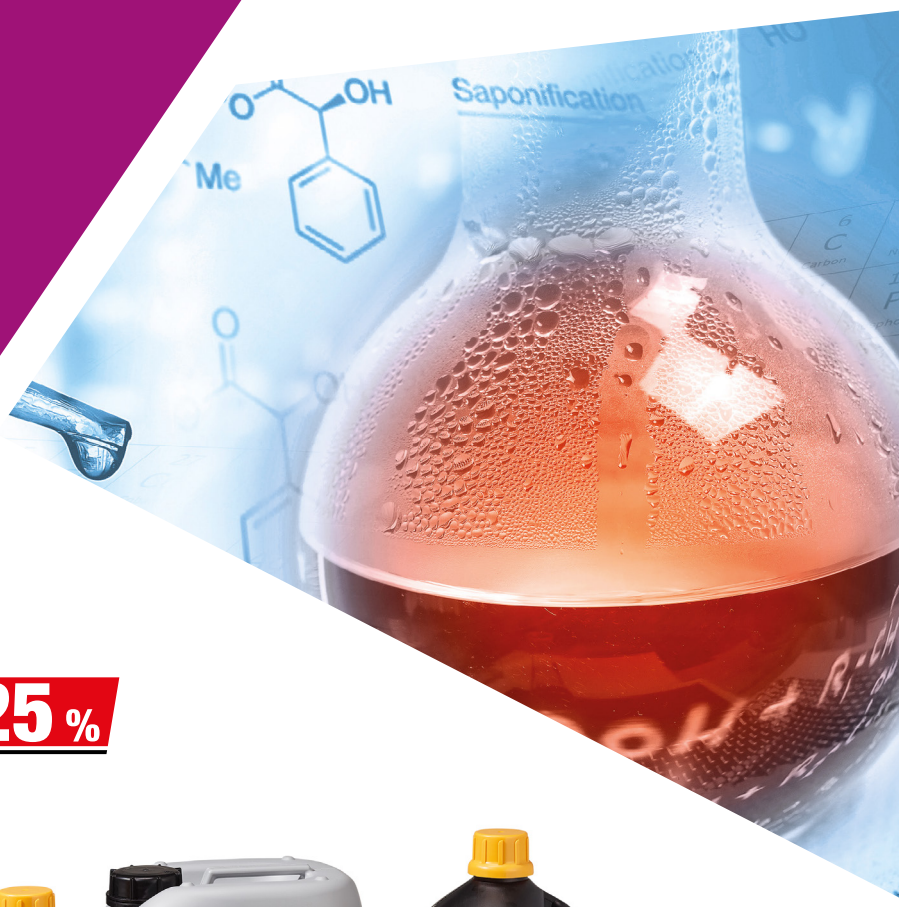
Chemicals

Organic & Biochemicals

TOP Offers



Detergents

-25 %

Tween® 20
Ph. Eur.

Non-ionic detergent.

Art. No.	Pack Qty.	Pack.	€	€
9127.1	250 g	plastic	~~22,90~~	**16,90**
9127.2	1 kg	plastic	~~57,90~~	**43,40**
9127.3	2.5 kg	plastic	~~109,00~~	**81,75**
9127.4	5 kg	plastic	~~179,00~~	**134,25**
9127.8	10 kg	plastic	~~329,00~~	**246,75**

Tween® 40
Ph. Eur.

Non-ionic detergent.

Art. No.	Pack Qty.	Pack.	€	€
8240.1	250 g	plastic	~~24,50~~	**18,35**
8240.2	500 g	plastic	~~41,50~~	**30,90**
8240.3	1 kg	plastic	~~69,00~~	**51,75**

Tween® 60
Ph. Eur.

Non-ionic detergent.

Art. No.	Pack Qty.	Pack.	€	€
9694.1	250 g	plastic	~~26,50~~	**19,85**
9694.2	500 g	plastic	~~45,90~~	**34,40**
9694.3	1 kg	plastic	~~75,90~~	**56,90**

Tween® 80
Ph. Eur.

Non-ionic detergent.

Art. No.	Pack Qty.	Pack.	€	€
9139.1	250 g	plastic	~~25,90~~	**19,40**
9139.3	500 g	plastic	~~44,90~~	**33,65**
9139.2	1 kg	plastic	~~77,90~~	**58,40**
9139.4	2.5 kg	plastic	~~139,00~~	**104,25**
9139.5	5 kg	plastic	~~219,00~~	**164,25**
9139.6	10 kg	plastic	~~395,00~~	**296,25**

Valid from from 1 April to 31 May 2022

Carl Roth GmbH + Co. KG · Schoemperlenstr. 3-5 · 76185 Karlsruhe

Linegal Chemicals · ul. Kasprzaka 44/52 · 01-224 Warszawa

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Kontakt: www.carlroth.com/pl/pl/Obsluga-zamowien · www.carlroth.com/pl/pl/Przedstawiciele-handlowi

Obowiązują ogólne warunki handlowe i warunki dostawy firmy Carl Roth GmbH + Co. KG, Karlsruhe (Niemcy)

Detergents

-20 %

Brij® 35
for biochemistry

Non-ionic detergent.

Warning H302-H319-H410

Art. No.	Pack Qty.	Pack.	€	€
CN21.1	250 g	plastic	~~19,50~~	**15,60**
CN21.2	500 g	plastic	~~29,90~~	**23,90**
CN21.3	1 kg	plastic	~~47,50~~	**38,00**

Cetylpyridinium chloride monohydrate (CPC)
≥98 %, for biochemistry

Cationic detergent

Danger

H301-H315-H319-H330-H335-H410

Art. No.	Pack Qty.	Pack.	€	€
CN27.1	100 g	plastic	~~31,90~~	**25,50**
CN27.2	500 g	plastic	~~122,50~~	**98,00**

Digitonin
Ultra Quality

Water soluble quality, for biochemistry.
Non-ionic detergent.

Danger H301+H311+H331

Art. No.	Pack Qty.	Pack.	€	€
HN76.3	100 mg	glass	~~84,90~~	**67,90**
HN76.1	250 mg	glass	~~179,00~~	**142,90**
HN76.2	1 g	glass	~~539,00~~	**430,90**

Dodecyl-β-D-maltoside (DDM)
≥99 %, for biochemistry

Non-ionic detergent.

Art. No.	Pack Qty.	Pack.	€	€
CN26.1	500 mg	glass	~~45,50~~	**36,40**
CN26.2	1 g	glass	~~72,90~~	**58,30**
CN26.3	2.5 g	glass	~~157,50~~	**126,00**
CN26.4	10 g	glass	~~515,00~~	**412,00**
CN26.5	50 g	plastic	~~1.450,00~~	**1.160,00**

n-Octyl-β-D-glucopyranoside (OGP)
≥98 %, for biochemistry

Non-ionic detergent.

Art. No.	Pack Qty.	Pack.	€	€
CN23.1	1 g	glass	~~29,90~~	**23,90**
CN23.2	5 g	glass	~~105,00~~	**84,00**
CN23.3	10 g	glass	~~179,00~~	**142,90**

SDS / Sodium lauryl sulphate
≥95 %

Anionic detergent; active substance for studies with surfactants.

Danger

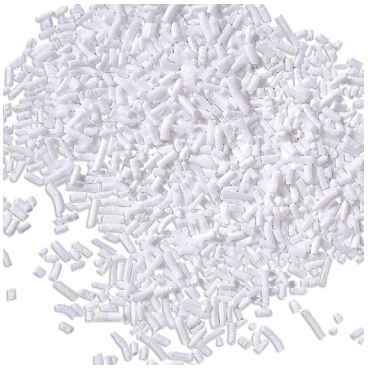
H228-H302+H332-H315-H318-H335-H412

Art. No.	Pack Qty.	Pack.	€	€
5136.1	1 kg	plastic	~~55,90~~	**44,70**
5136.2	5 kg	cardboard	~~195,00~~	**156,00**

Span® 80
for synthesis

Non-ionic detergent.

Art. No.	Pack Qty.	Pack.	€	€
9426.1	250 g	glass	~~27,90~~	**22,30**
9426.2	1 kg	glass	~~73,50~~	**58,80**



SDS pellets
≥99 %, for biochemistry

Anionic detergent.

Danger H302-H315-H318-H412

Art. No.	Pack Qty.	Pack.	€	€
CN30.1	250 g	plastic	~~29,90~~	**23,90**
CN30.2	500 g	plastic	~~45,90~~	**36,70**
CN30.3	1 kg	plastic	~~75,90~~	**60,70**
CN30.4	2.5 kg	plastic	~~145,00~~	**116,00**
CN30.7	5 kg	plastic	~~229,00~~	**182,90**

-20 %

Environmentally friendlier Alternative to Triton® X 100

Ecosurf™ SA-9
extra pure

Alternative to Triton® X-100, non-ionic detergent.

Danger H302-H318

Art. No.	Pack Qty.	Pack.	€	€
0982.1	100 ml	glass	~~17,50~~	**14,00**
0982.2	500 ml	glass	~~34,90~~	**27,90**
0982.3	1 l	plastic	~~59,50~~	**47,60**
0982.4	2.5 l	plastic	~~112,50~~	**90,00**
0982.5	10 l	plastic	~~319,00~~	**254,90**

Tergitol™ 15-S-9
extra pure

Alternative to Triton® X-100, non-ionic detergent.

Warning H302+H332-H412

Art. No.	Pack Qty.	Pack.	€	€
9975.1	100 ml	glass	~~18,50~~	**14,80**
9975.2	500 ml	glass	~~41,50~~	**33,20**
9975.3	1 l	plastic	~~54,50~~	**43,60**
9975.4	2.5 l	plastic	~~99,00~~	**79,20**
9975.5	10 l	plastic	~~289,00~~	**230,90**

► Information on properties of **Tergitol™ 15-S-9** and **Ecosurf™ SA-9** can be found in the technical brochure **"Properties of Triton® X-100 and Alternative Products"**

ROTI®Fair – Buffer & Salt Solutions

-20 %

Highly pure reagents and buffer mixes in pouches or as tablets.

A tablet or the contents of a sachet is simply dissolved in the appropriate amount of water – and the desired solution is ready. By adjusting the amount of water, the concentration can easily be varied and a higher concentrated stock solution, for example, can be prepared.

- **Easy to use** – simply dissolve the contents of a bag or tablet in water.
- **Time saving** – no need to weigh reagents or adjust pH.
- **Practical** – dry reagents for direct use eliminate the need to prepare stock solutions that have been stored for long periods.
- **Reliable** – our stringent quality control ensures high batch consistency.

ROTI®Fair Products – Sustainability

As ready-to-use mixtures, ROTI®Fair products reduce the user's exposure to health-damaging substances used for preparation or pH adjustment. The production of ROTI®Fair tablets and sachets is carefully controlled in large quantitis and can be made energy efficient. ROTI®Fair products reduce the total amount of waste produced and improve the footprint in the climate balance.

Product name	Buffer/solution	Use	Batch quantity	End conc.	pH value	Art. No.	Pack Qty.	€	€
ROTI®Fair 0.9 % NaCl	Sodium chloride solution	For preparation of salt solutions and buffer concoctions	1000 ml/tablet	0,9 %		**1067.1**	10 unit(s)	~~52,90~~	**42,30**
						1067.2	100 unit(s)	~~129,00~~	**103,20**
ROTI®Fair PBS 7.2	Phosphate Buffered Saline	General solution for assays in molecular biology and biochemistry	1000 ml/tablet	1x	7,2 ±0,05	**1106.1**	10 unit(s)	~~81,50~~	**65,20**
						1106.2	100 unit(s)	~~395,00~~	**316,00**
ROTI®Fair PBS 7.4	Phosphate Buffered Saline	General solution for assays in molecular biology and biochemistry	100 ml/tablet	1x	7,4 ±0,05	**1107.1**	100 unit(s)	~~61,90~~	**49,50**
	Phosphate Buffered Saline	General solution for assays in molecular biology and biochemistry	200 ml/tablet	1x	7,4 ±0,05	**1108.1**	100 unit(s)	~~102,50~~	**82,00**
	Phosphate Buffered Saline	General solution for assays in molecular biology and biochemistry	500 ml/tablet	1x	7,4 ±0,05	**1111.1**	12 unit(s)	~~53,90~~	**42,90**
						1111.2	100 unit(s)	~~217,50~~	**174,00**
	Phosphate Buffered Saline	General solution for assays in molecular biology and biochemistry	1000 ml/tablet	1x	7,4 ±0,05	**1112.1**	10 unit(s)	~~79,90~~	**63,90**
						1112.2	100 unit(s)	~~389,50~~	**311,60**
	Phosphate Buffered Saline	General solution for assays in molecular biology and biochemistry	10 l/pouch	1x	7,4 ±0,05	**1101.1**	1 unit(s)	~~42,50~~	**34,00**
	Phosphate Buffered Saline	General solution for assays in molecular biology and biochemistry	50 l/pouch	1x	7,4 ±0,05	**1103.1**	1 unit(s)	~~132,50~~	**106,00**
ROTI®Fair 10x PBS 7.4	Phosphate Buffered Saline	General solution for assays in molecular biology and biochemistry	1000 ml/pouch	10x	7,4 ±0,05	**1105.1**	5 unit(s)	~~104,50~~	**83,60**
ROTI®Fair PBS potassium-free 7.4	Phosphate Buffered Saline, potassium-free	Potassium-free, general solution for assays in molecular biology and biochemistry	1000 ml/tablet	1x	7,4 ±0,05	**1113.1**	10 unit(s)	~~79,90~~	**63,90**
						1113.2	100 unit(s)	~~389,50~~	**311,60**
ROTI®Fair PBST 7.4 **-30 %**	Phosphate Buffered Saline/Tween	General solution for assays in molecular biology and biochemistry	500 ml/tablet	1x	7,4 ±0,05	**1115.1**	12 unit(s)	~~69,50~~	**48,65**
						1115.2	100 unit(s)	~~281,50~~	**196,90**
-30 %	Phosphate Buffered Saline/Tween	General solution for assays in molecular biology and biochemistry	1000 ml/tablet	1x	7,4 ±0,05	**1116.1**	10 unit(s)	~~90,50~~	**63,35**
						1116.2	100 unit(s)	~~445,00~~	**311,50**
ROTI®Fair TBS 7.6	Tris-buffered salt solution, Tris Buffered Saline	General solution for assays in molecular biology and biochemistry	500 ml/tablet	1x	7,6 ±0,05	**1244.1**	10 unit(s)	~~67,90~~	**54,30**
						1244.2	100 unit(s)	~~349,00~~	**278,90**
ROTI®Fair TBST 7.6	Tris-buffered salt solution with Tween, Tris Buffered Saline/Tween	General solution for assays in molecular biology and biochemistry	500 ml/tablet	1x	7,6 ±0,05	**1248.1**	10 unit(s)	~~94,90~~	**75,90**
						1248.2	100 unit(s)	~~429,00~~	**342,90**

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

► **Albumin solutions** and **ROTI®Quant** can be found in the enclosed Life Science Mailing

Enzymes – Top Sellers -25 %

DNAse-free RNAse-free

Lysozyme

≥45 000 FIP U/mg, lyophilized

From chicken egg white, free from albumin.

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

Danger H334

Art. No.	Pack Qty.	Pack.	€	€
8259.1	1 g	glass	~~30,90~~	**22,90**
8259.2	10 g	glass	~~159,00~~	**119,25**
8259.3	25 g	glass	~~319,00~~	**239,25**

Proteinase K

≥30 mAnson U/mg, lyophilized

Isolated from fungi (*Tritirachium album*).

Storage temperature: +4 °C

Danger H315-H317-H319-H334-H335

Art. No.	Packaging	Pack.	€	€
7528.1	1 x 100 mg	glass	~~99,90~~	**80,50**
7528.5	1 x 250 mg	glass	~~187,50~~	**151,15**
7528.2	1 x 500 mg	glass	~~339,00~~	**273,30**
7528.3	in 30 ml glass vial	glass	~~375,00~~	**302,30**
7528.4	1 x 1 g	glass	~~559,00~~	**450,65**
7528.6	1 x 5 g	glass	~~2.235,00~~	**1.801,95**

Zymolyase® 100T

≥100 U/mg, for biochemistry and molecular biology

For lysis of yeast cells.
Isolated from *Arthrobacter luteus*.

Storage temperature: +4 °C
Transport temperature: cooled

Art. No.	Pack Qty.	Pack.	€	€
9329.1	100 mg	glass	~~299,00~~	**224,25**
9329.2	500 mg	glass	~~949,00~~	**711,75**

Papain

>30 000 USP-U/mg, for biochemistry

Made from *Carica papaya*.

pH optimum: 6.0
Temperature optimum: 65 °C

Stock solution: 10 mg/ml in water

Storage temperature: +4 °C

Danger H315-H319-H334-H335

Art. No.	Pack Qty.	Pack.	€	€
8933.1	25 g	plastic	~~54,90~~	**40,90**
8933.2	100 g	plastic	~~149,50~~	**111,90**

Trypsin

TSE-/BSE-free

5.000 USP-U/mg

Serine protease isolated from porcine pancreas, lyophilised.

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

Danger H315-H319-H334-H335

Art. No.	Pack Qty.	Pack.	€	€
2193.1	100 mg	glass	~~34,90~~	**25,90**
2193.2	500 mg	glass	~~109,00~~	**81,75**
2193.3	5 g	glass	~~895,00~~	**671,25**

Zymolyase® 20T -30 %

≥20 U/mg, for biochemistry and molecular biology

For lysis of yeast cells.
Isolated from *Arthrobacter luteus*.

Storage temperature: +4 °C
Transport temperature: cooled

Art. No.	Pack Qty.	Pack.	€	€
9324.1	100 mg	glass	~~84,50~~	**58,90**
9324.2	500 mg	glass	~~239,00~~	**167,30**
9324.3	1 g	glass	~~415,00~~	**290,50**

Substrate – Top Sellers -25 %

ROTI®DAB Kit

DNAse-free RNAse-free

for immunochemistry

Substrate kit for detection of HRP activity on blot membranes and slides.

Storage temperature: +4 °C
Transport temperature: cooled

Danger H302-H341-H351-H360D-H373

Art. No.	Packaging	Pack Qty.	Pack.	€	€
9202.1	for ca. 40 assays, n dropper bottles	1 kit	cardboard	~~199,00~~	**149,25**

5-Bromo-4-chloro-3-indolyl phosphate *p*-toluidine salt

≥99 %, BioScience Grade

Histochemical substrate for phosphatase.

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

Warning H371

Art. No.	Pack Qty.	Pack.	€	€
6368.1	500 mg	glass	~~39,90~~	**29,90**
6368.2	1 g	glass	~~77,50~~	**57,90**
6368.3	5 g	glass	~~289,00~~	**216,75**

X-Gluc

≥99 %, for microbiology

Glucuronidase substrate

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

Art. No.	Pack Qty.	Pack.	€	€
0018.1	100 mg	glass	~~112,90~~	**84,65**
0018.2	500 mg	glass	~~425,00~~	**318,75**
0018.3	1 g	glass	~~709,00~~	**531,75**

ROTI®Lumin

ready-to-use

10x conc., fluorescence-free, for protein and cytoimmunochemistry

Chemoluminescence substrate for peroxidase mediated detection systems.

Storage temperature: +4 °C

Art. No.	Packaging	Pack Qty.	Pack.	€	€
P078.1	2 x 120 ml	1 kit	plastic	~~329,00~~	**246,75**
P078.2	2 x 25 ml	1 kit	plastic	~~89,90~~	**67,40**

5-Bromo-4-chloro-3-indolyl phosphate disodium salt

≥99 %

Substrate for alkaline phosphatase, in particular in immunoblot procedures.

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

Art. No.	Pack Qty.	Pack.	€	€
A155.1	100 mg	glass	~~29,90~~	**22,40**
A155.2	500 mg	glass	~~129,00~~	**96,75**
A155.3	1 g	glass	~~229,00~~	**171,75**
A155.4	5 g	glass	~~729,00~~	**546,75**

X-β-Gal

DNAse-free RNAse-free Protease-free

≥99 %, BioScience Grade

Ideal for colorimetric detection of β-galactosidase activity.

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

Art. No.	Pack Qty.	Pack.	€	€
2315.1	100 mg	glass	~~21,90~~	**16,40**
2315.2	500 mg	glass	~~64,90~~	**48,65**
2315.3	1 g	glass	~~121,50~~	**90,90**
2315.5	2.5 g	glass	~~229,00~~	**171,75**
2315.4	5 g	glass	~~409,00~~	**306,75**

Inhibitors - Top Sellers

-22 %

Aprotinin

3,0 PEU/mg, for biochemistry

Inhibitor for inhibition of serin proteases, lyophilized and made of beef lung.

Aprotinin inhibits trypsin, chymotrypsin, plasmin and kallikrein with high activity.

Kininogens are cysteine proteases from the cystatin superfamily. Kininogenases split kininogens into kinins (inflammation mediators).

Unit definition

Activity: 1 PEU (Ph. Eur. Unit) corresponds to 1950 KIU (Kallikrein Inhibitory Units). 1 PEU corresponds to approx. 1.5 TIU (Trypsin Inhibitory Units). 1 TIU corresponds to approx. 1300 KIU. Specific Activity: ≥3.0 PEU/mg corresponding to ≥5850 KIU/mg

Directions for use

Recommended end concentration: 1.54 µM (10 µg/ml). pH-optimum: 7.0-8.0.

Dissolves easily in water. Stock solution: 1.54 mM (10 mg/ml) in H_2O or buffer. Storage of stock solution: in aliquots at –20 °C.

M 6500 g/mol

Storage temperature: +4 °C

WGK 1

Lyophilized from bovine lungs.

Art. No.	Pack Qty.	Pack.	€	€
A162.1	10 mg	glass	~~40,90~~	31,90
A162.2	50 mg	glass	~~119,50~~	93,20
A162.3	100 mg	glass	~~209,00~~	162,90
A162.5	250 mg	glass	~~439,00~~	342,40
A162.4	500 mg	glass	~~829,00~~	646,60

AEBSF hydrochloride

≥98 %, for biochemistry

Inhibitor of serine proteases

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

Danger H314

Art. No.	Pack Qty.	Pack.	€	€
2931.1	25 mg	plastic	~~21,50~~	16,75
2931.2	100 mg	plastic	~~45,90~~	35,80
2931.3	500 mg	plastic	~~185,00~~	144,30

Bestatin hydrochloride

≥98 %, for biochemistry

Inhibitor of aminopeptidases

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

Art. No.	Pack Qty.	Pack.	€	€
2937.1	5 mg	plastic	~~82,50~~	64,35
2937.2	25 mg	plastic	~~315,00~~	245,70

Phenylmethyl sulphonyl fluoride

≥98 %, for biochemistry

Irreversible inhibitor of serine- and thiol proteases. Reversible effect on cysteine proteases.

Danger H301-H314

Art. No.	Pack Qty.	Pack.	€	€
6367.4	348 mg	glass	~~15,90~~	12,40
6367.1	5 g	plastic	~~32,90~~	25,65
6367.2	25 g	plastic	~~109,00~~	84,90
6367.3	100 g	plastic	~~305,00~~	237,90

Pefabloc® SC-Protease Inhibitor

Pefabloc® ≥95 %, for biochemistry

Irreversible inhibitor of serine proteases.

Storage temperature: +4 °C

Danger H314

Art. No.	Pack Qty.	Pack.	€	€
A154.1	100 mg	glass	~~73,50~~	57,30
A154.2	500 mg	glass	~~305,00~~	237,90
A154.3	1 g	glass	~~549,00~~	428,20

E-64

-30 %

≥99 %, for biochemistry

Inhibitor of cysteine proteases.

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

Art. No.	Pack Qty.	Pack.	€	€
2935.1	5 mg	plastic	~~99,00~~	69,30
2935.2	25 mg	plastic	~~349,00~~	244,30

Pepstatin A

≥98 %, for biochemistry

Inhibitor of acidic / aspartic proteases

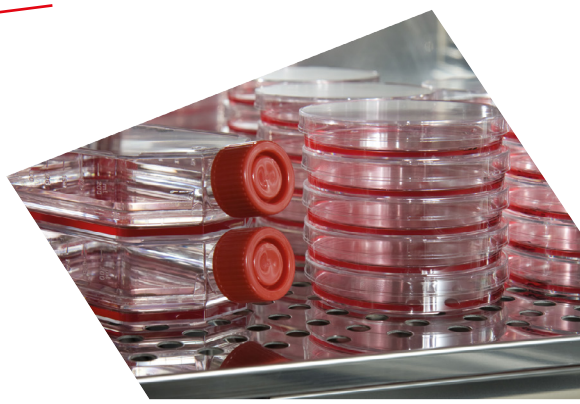
Isolated from streptomycin and other actinomycetes.

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

Art. No.	Pack Qty.	Pack.	€	€
2936.1	5 mg	plastic	~~32,90~~	25,65
2936.2	25 mg	plastic	~~102,50~~	79,95
2936.3	100 mg	plastic	~~335,00~~	261,30

CELLPURE®
Reagents for Cell Culture

Endotoxin tested



CELLPURE® Salts

-20 %

Calcium chloride dihydrate
CELLPURE® ≥99 %

For cell culture and biochemistry.

⚠ **Warning** H319

Endotoxins ..... ≤5,0 I.U./g

Art. No.	Pack Qty.	Pack.	€	€
HN04.1	250 g	plastic	~~19,90~~	**15,90**
HN04.2	500 g	plastic	~~37,50~~	**30,00**
HN04.3	1 kg	plastic	~~64,90~~	**51,90**

Magnesium chloride hexahydrate
CELLPURE® ≥99 %

For cell culture and biochemistry.

Endotoxins ..... ≤3,0 I.U./g

Art. No.	Pack Qty.	Pack.	€	€
HN03.1	250 g	plastic	~~22,90~~	**18,30**
HN03.2	500 g	plastic	~~34,90~~	**27,90**
HN03.3	1 kg	plastic	~~54,90~~	**43,90**
HN03.4	2.5 kg	plastic	~~105,00~~	**84,00**
HN03.5	5 kg	plastic	~~189,00~~	**150,90**

Potassium chloride
CELLPURE® ≥99 %

For cell culture and biochemistry.

Endotoxins ..... ≤3,0 I.U./g

Art. No.	Pack Qty.	Pack.	€	€
HN02.1	250 g	plastic	~~19,90~~	**15,90**
HN02.2	500 g	plastic	~~27,50~~	**22,00**
HN02.3	1 kg	plastic	~~49,50~~	**39,60**
HN02.4	2.5 kg	plastic	~~97,50~~	**78,00**
HN02.7	25 kg	plastic	~~675,00~~	**540,00**

Sodium chloride
CELLPURE® ≥99,5 %

For cell culture and biochemistry.

Endotoxins ..... ≤5 I.U./g

Art. No.	Pack Qty.	Pack.	€	€
HN00.1	500 g	plastic	~~20,50~~	**16,40**
HN00.2	1 kg	plastic	~~27,90~~	**22,30**
HN00.3	5 kg	plastic	~~92,90~~	**74,30**

tri-Sodium citrate dihydrate
CELLPURE® ≥99 %

For cell culture and biochemistry.

Endotoxins ..... ≤6,0 E.U./g

Art. No.	Pack Qty.	Pack.	€	€
HN12.1	250 g	plastic	~~26,50~~	**20,90**
HN12.2	500 g	plastic	~~47,90~~	**38,30**
HN12.3	1 kg	plastic	~~77,90~~	**62,30**
HN12.4	2.5 kg	plastic	~~165,00~~	**132,00**

CELLPURE® Carbohydrates

-25 %

D(+)-Galactose
CELLPURE® ≥99 %

For cell culture and biochemistry.

Endotoxins ..... ≤10 E.U./g

Art. No.	Pack Qty.	Pack.	€	€
8878.1	10 g	plastic	~~31,90~~	**23,90**
8878.2	25 g	plastic	~~61,90~~	**46,40**
8878.3	50 g	plastic	~~109,00~~	**81,75**
8878.4	100 g	plastic	~~209,00~~	**156,75**

D(+)-Maltose monohydrate
CELLPURE® ≥97 %

For cell culture and biochemistry.

Endotoxins ..... ≤1,0 E.U./g

Art. No.	Pack Qty.	Pack.	€	€
8882.1	25 g	plastic	~~26,90~~	**19,90**
8882.2	100 g	plastic	~~59,90~~	**44,90**
8882.3	250 g	plastic	~~115,00~~	**86,25**
8882.4	500 g	plastic	~~195,00~~	**146,25**

D(+)-Mannose
CELLPURE® ≥99 %

For cell culture and biochemistry.

Endotoxins ..... ≤10 E.U./g

Art. No.	Pack Qty.	Pack.	€	€
8887.1	10 g	plastic	~~29,90~~	**22,40**
8887.2	25 g	plastic	~~58,90~~	**43,90**
8887.3	50 g	plastic	~~103,50~~	**77,60**
8887.4	100 g	plastic	~~189,00~~	**141,75**

D(+)-Glucose
CELLPURE® ≥98 %, anhydrous

For cell culture and biochemistry.

Endotoxins ..... ≤5,0 I.U./g

Art. No.	Pack Qty.	Pack.	€	€
HN06.1	250 g	plastic	~~14,50~~	**10,85**
HN06.2	500 g	plastic	~~22,90~~	**16,90**
HN06.3	1 kg	plastic	~~34,50~~	**25,85**
HN06.4	5 kg	plastic	~~112,50~~	**84,35**

D(–)-Mannitol
CELLPURE® ≥97 %

For cell culture and biochemistry.

Endotoxins ..... ≤2,5 E.U./g

Art. No.	Pack Qty.	Pack.	€	€
8883.1	100 g	plastic	~~27,90~~	**20,90**
8883.3	250 g	plastic	~~55,90~~	**41,90**
8883.2	500 g	plastic	~~99,90~~	**74,90**

D(+)-Trehalose dihydrate
CELLPURE® ≥98 %

For cell culture and biochemistry.

Endotoxins ..... 2,4 E.U./g

Art. No.	Pack Qty.	Pack.	€	€
8897.1	10 g	plastic	~~35,90~~	**26,90**
8897.2	25 g	plastic	~~64,90~~	**48,65**
8897.3	50 g	plastic	~~109,00~~	**81,75**
8897.4	100 g	plastic	~~197,50~~	**147,90**

► For our extended assortment of **CELLPURE® reagents** see chapter Cell Biology in our current catalogue or at www.carlroth.pl

CELLPURE®
Reagents for Cell Culture

Endotoxin tested

CELLPURE® Amino Acids

-20 %

L-Alanyl-L-glutamine
CELLPURE® ≥99 %

Art. No.	Pack Qty.	Pack.	€	€
6831.1	5 g	plastic	~~33,90~~	26,90
6831.2	10 g	plastic	~~47,90~~	38,30
6831.3	25 g	plastic	~~95,90~~	76,70
6831.4	100 g	plastic	~~319,00~~	254,90

L-Arginine
CELLPURE® ≥99 %

For cell culture and biochemistry.

Warning H319

Art. No.	Pack Qty.	Pack.	€	€
1655.1	25 g	plastic	~~11,50~~	9,20
1655.2	100 g	plastic	~~28,50~~	22,80
1655.3	500 g	plastic	~~92,90~~	74,30

L-Arginine monohydrochloride
CELLPURE® ≥98,5 %

For cell culture and biochemistry.

Art. No.	Pack Qty.	Pack.	€	€
1689.1	25 g	plastic	~~16,50~~	12,90
1689.2	100 g	plastic	~~28,90~~	22,90
1689.3	500 g	plastic	~~95,50~~	76,40

L-Asparagine monohydrate
CELLPURE® ≥99 %

For cell culture and biochemistry.

Art. No.	Pack Qty.	Pack.	€	€
KK37.1	50 g	plastic	~~28,90~~	22,90
KK37.2	250 g	plastic	~~99,00~~	79,20
KK37.3	500 g	plastic	~~179,00~~	142,90

L-Cysteine
CELLPURE® ≥99 %

For cell culture and biochemistry.

Warning H302

Art. No.	Pack Qty.	Pack.	€	€
1693.1	25 g	plastic	~~28,50~~	22,80
1693.2	100 g	plastic	~~69,90~~	55,90
1693.3	500 g	plastic	~~299,00~~	238,90

L-Cysteine hydrochloride monohydrate
CELLPURE® ≥99 %

For cell culture and biochemistry.

Warning H315-H319-H335

Art. No.	Pack Qty.	Pack.	€	€
1694.1	25 g	plastic	~~19,90~~	15,90
1694.2	100 g	plastic	~~45,90~~	36,70
1694.3	500 g	plastic	~~189,00~~	150,90

L-Glutamine
CELLPURE® ≥99 %

For cell culture and biochemistry.

Art. No.	Pack Qty.	Pack.	€	€
HN08.1	25 g	plastic	~~20,50~~	16,40
HN08.2	100 g	plastic	~~39,90~~	31,90
HN08.3	500 g	plastic	~~139,00~~	111,20

L-Glutamic acid
CELLPURE® ≥99 %

For cell culture and biochemistry.

Art. No.	Pack Qty.	Pack.	€	€
1743.1	25 g	plastic	~~16,50~~	12,90
1743.2	100 g	plastic	~~26,90~~	21,50
1743.3	500 g	plastic	~~83,50~~	66,80

L-Glutathione reduced
CELLPURE® ≥99 %

Art. No.	Pack Qty.	Pack.	€	€
6832.1	2.5 g	glass	~~27,90~~	22,30
6832.2	5 g	glass	~~38,90~~	30,90
6832.3	10 g	glass	~~59,90~~	47,90
6832.4	25 g	glass	~~120,50~~	96,40

Glycine
CELLPURE® ≥99 %

For cell culture and biochemistry.

Art. No.	Pack Qty.	Pack.	€	€
HN07.1	100 g	plastic	~~18,90~~	14,90
HN07.2	500 g	plastic	~~53,90~~	42,90
HN07.3	1 kg	plastic	~~97,50~~	78,00

L-Histidine
CELLPURE® ≥99 %

For cell culture and biochemistry.

Art. No.	Pack Qty.	Pack.	€	€
1696.1	25 g	plastic	~~28,90~~	22,90
1696.2	100 g	plastic	~~62,50~~	50,00
1696.3	500 g	plastic	~~249,00~~	198,90

L-Isoleucine
CELLPURE® ≥99 %

For cell culture and biochemistry.

Art. No.	Pack Qty.	Pack.	€	€
1698.1	25 g	plastic	~~25,90~~	20,70
1698.2	100 g	plastic	~~61,90~~	49,50
1698.3	500 g	plastic	~~249,00~~	198,90

L-Leucine
CELLPURE® ≥99 %

For cell culture and biochemistry.

Art. No.	Pack Qty.	Pack.	€	€
1699.1	25 g	plastic	~~19,90~~	15,90
1699.2	100 g	plastic	~~45,90~~	36,70
1699.3	500 g	plastic	~~155,00~~	124,00

L-Lysine monohydrate
CELLPURE® ≥98,5 %

For cell culture and biochemistry.

Art. No.	Pack Qty.	Pack.	€	€
6829.1	25 g	plastic	~~55,90~~	44,70
6829.2	100 g	plastic	~~117,50~~	94,00
6829.3	500 g	plastic	~~459,00~~	366,90

L-Methionine
CELLPURE® ≥99 %

For cell culture and biochemistry.

Art. No.	Pack Qty.	Pack.	€	€
1702.1	25 g	plastic	~~18,50~~	14,80
1702.2	100 g	plastic	~~38,50~~	30,80
1702.3	500 g	plastic	~~149,00~~	119,20

L-Phenyalanine
CELLPURE® ≥99 %

For cell culture and biochemistry.

Art. No.	Pack Qty.	Pack.	€	€
1709.1	25 g	plastic	~~20,90~~	16,70
1709.2	100 g	plastic	~~48,50~~	38,80
1709.3	500 g	plastic	~~185,00~~	148,00

L-Proline
CELLPURE® ≥98,5 %

For cell culture and biochemistry.

Art. No.	Pack Qty.	Pack.	€	€
1713.1	25 g	plastic	~~31,90~~	25,50
1713.2	100 g	plastic	~~79,90~~	63,90
1713.3	500 g	plastic	~~299,00~~	238,90

L-Serine
CELLPURE® ≥99 %

For cell culture and biochemistry.

Art. No.	Pack Qty.	Pack.	€	€
1714.1	25 g	plastic	~~27,90~~	22,30
1714.2	100 g	plastic	~~68,90~~	54,90
1714.3	500 g	plastic	~~269,00~~	214,90

L-Threonine
CELLPURE® ≥99 %

For cell culture and biochemistry.

Art. No.	Pack Qty.	Pack.	€	€
1738.1	25 g	plastic	~~20,90~~	16,70
1738.2	100 g	plastic	~~42,90~~	34,30
1738.3	500 g	plastic	~~169,00~~	134,90

L-Tryptophan
CELLPURE® ≥99 %

For cell culture and biochemistry.

Art. No.	Pack Qty.	Pack.	€	€
1739.1	25 g	plastic	~~30,90~~	24,70
1739.2	100 g	plastic	~~89,90~~	71,90
1739.3	500 g	plastic	~~369,00~~	294,90

Deuterated Solvents and Compounds

-20 %

Acetone D6
99,8 Atom%D

For nuclear magnetic resonance spectroscopy.

Danger H225-H319-H336-EUH066

Art. No.	Pack Qty.	Pack.	€	€
AE51.3	7.5 ml	glass ampoule	~~59,90~~	**47,90**
AE51.1	10 ml	glass	~~54,50~~	**43,60**
AE51.4	10 ml	septum bottle	~~56,50~~	**45,20**
AE51.5	25 ml	glass	~~125,00~~	**100,00**
AE51.2	50 ml	glass	~~232,50~~	**186,00**

Dichloromethane D2
99,5 Atom%D

For nuclear magnetic resonance spectroscopy.

Warning H315-H319-H336-H351

Art. No.	Pack Qty.	Pack.	€	€
AE55.3	5 ml	glass	~~62,90~~	**50,30**
AE55.5	7.5 ml	glass ampoule	~~110,90~~	**88,70**
AE55.1	10 ml	glass	~~109,90~~	**87,90**
AE55.2	25 ml	glass	~~252,50~~	**202,00**
AE55.4	50 ml	glass	~~459,00~~	**366,90**

Methanol D4
99,8 Atom%D

For nuclear magnetic resonance spectroscopy.

Danger
H225-H301+H311+H331-H370

Art. No.	Pack Qty.	Pack.	€	€
AE57.3	7.5 ml	glass ampoule	~~78,50~~	**62,80**
AE57.1	10 ml	glass	~~74,50~~	**59,60**
AE57.4	10 ml	septum bottle	~~76,50~~	**61,20**
AE57.5	25 ml	glass	~~169,00~~	**134,90**
AE57.2	50 ml	glass	~~319,00~~	**254,90**

Acetonitrile D3
99,8 Atom%D

For nuclear magnetic resonance spectroscopy.

Danger
H225-H302+H312+H332-H319

Art. No.	Pack Qty.	Pack.	€	€
7911.2	7.5 ml	glass ampoule	~~87,90~~	**70,30**
7911.1	10 ml	glass	~~85,90~~	**68,70**
7911.3	25 ml	glass	~~165,00~~	**132,00**

Benzene D6
99,5 Atom%D

For nuclear magnetic resonance spectroscopy.

Danger
H225-H304-H315-H319-H340-H350i-H372

Art. No.	Pack Qty.	Pack.	€	€
AE53.1	10 ml	glass	~~64,50~~	**51,60**
AE53.3	10 ml	septum bottle	~~67,50~~	**54,00**
AE53.4	25 ml	glass	~~139,00~~	**111,20**
AE53.2	50 ml	glass	~~255,00~~	**204,00**
AE53.5	100 ml	glass	~~489,00~~	**390,90**

Dimethyl sulphoxide D6 with TMS (0.03 vol.%)
99,8 Atom%D

For nuclear magnetic resonance spectroscopy.

Art. No.	Pack Qty.	Pack.	€	€
AE60.3	7.5 ml	glass ampoule	~~47,90~~	**38,30**
AE60.1	10 ml	glass	~~46,90~~	**37,50**
AE60.4	25 ml	glass	~~89,90~~	**71,90**
AE60.2	50 ml	glass	~~172,50~~	**138,00**

New in the Range

NEW

Product name	Purity	Packaging	Pack.	Art. No.	Pack Qty.	€	€
Acetone D6	100 Atom%D	10 x 0,75 ml in ampoules	glass ampoule	**1K3E.1**	7.5 ml	~~139,00~~	**111,20**
Acetonitrile D3	100 Atom%D	10 x 0,75 ml in ampoules	glass ampoule	**1K3H.1**	7.5 ml	~~170,00~~	**136,00**
Acetyl chloride D3	99 Atom%D		glass	**1L34.1**	5 ml	~~139,00~~	**111,20**
Biphenyl D10	99 Atom%D		glass	**1L36.1**	1 g	~~109,00~~	**87,20**
Deuterium chloride 20 % solution in D_2O	99,5 Atom%D		glass	**1K3L.1**	25 ml	~~109,00~~	**87,20**
1,4-Dichlorobenzene D4	98 Atom%D		glass	**1L37.1**	1 g	~~78,50~~	**62,80**
Dimethyl carbonate D6	99,5 Atom%D		glass	**1L38.1**	1 ml	~~149,00~~	**119,20**
Dimethyl sulphoxide D6	100 Atom%D	10 x 0,75 ml in ampoules	glass ampoule	**1K3K.1**	7.5 ml	~~89,00~~	**71,20**
Formic acid D 95 % solution in D_2O	98 Atom%D		glass	**1L35.1**	5 ml	~~149,00~~	**119,20**
Phenylboronic acid D5	98 Atom%D		glass	**1L3A.1**	1 g	~~159,00~~	**127,20**
Sodium deuterium oxide 40 % solution in D_2O	99,5 Atom%D		glass	**1K3N.1**	10 g	~~44,90~~	**35,90**
Sodium formate D	99,5 Atom%D		glass	**1L39.1**	10 g	~~59,90~~	**47,90**

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

► Further deuterated compounds:

Complexing Agents -25 %

trans-1,2-Diaminocyclohexane-*N,N,N',N'*-tetracetic acid monohydrate
≥99 %, p.a., ACS

WGK 1

Warning H315-H319

Art. No.	Pack Qty.	Pack.	€	€
1412.1	25 g	plastic	~~35,90~~	**26,90**
1412.2	100 g	plastic	~~106,50~~	**79,85**
1412.3	250 g	plastic	~~229,50~~	**171,90**
1412.4	500 g	plastic	~~429,50~~	**321,90**

Nitrilotriacetic acid
≥99 %, p.a., ACS

WGK 2

Warning H319-H351

Art. No.	Pack Qty.	Pack.	€	€
4384.1	100 g	plastic	~~72,90~~	**54,65**

Ethylenediamine tetraacetic acid dipotassium salt dihydrate
≥99 %, p.a.

WGK 2

Warning H332-H373

Art. No.	Pack Qty.	Pack.	€	€
3053.1	100 g	plastic	~~27,90~~	**20,90**
3053.2	250 g	plastic	~~55,90~~	**41,90**
3053.3	500 g	plastic	~~99,50~~	**74,60**
3053.4	1 kg	plastic	~~179,00~~	**134,25**
3053.5	5 kg	plastic	~~709,00~~	**531,75**

EGTA
≥99 %, p.a.

For molecular biology and biochemistry.

WGK 1

Art. No.	Pack Qty.	Pack.	€	€
3054.1	10 g	plastic	~~36,50~~	**27,35**
3054.2	50 g	plastic	~~145,00~~	**108,75**
3054.3	100 g	plastic	~~249,00~~	**186,75**

Ethylenediamine tetraacetic acid
≥99 %, p.a., ACS

For molecular biology and biochemistry.

WGK 2

Warning H319

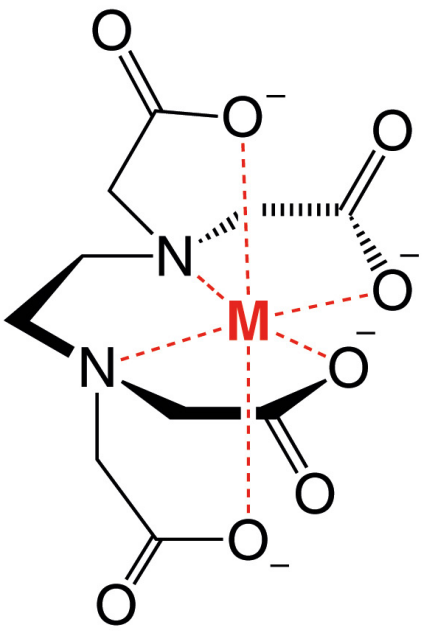
Art. No.	Pack Qty.	Pack.	€	€
8040.1	100 g	plastic	~~17,50~~	**12,90**
8040.3	500 g	plastic	~~39,90~~	**29,90**
8040.2	1 kg	plastic	~~59,90~~	**44,90**
8040.4	2.5 kg	plastic	~~119,00~~	**89,25**
8040.5	25 kg	plastic	~~929,00~~	**696,75**

Ethylenediamine tetraacetic acid tetrasodium salt tetrahydrate
≥99 %, p.a.

WGK 1

Danger H302-H318

Art. No.	Pack Qty.	Pack.	€	€
CP87.1	250 g	plastic	~~20,90~~	**15,65**
CP87.2	500 g	plastic	~~33,90~~	**25,40**
CP87.3	1 kg	plastic	~~57,90~~	**43,40**
CP87.4	5 kg	plastic	~~239,00~~	**179,25**



Calibration and Control Standards ROTI®Calipure

-20 %

Colour Standards according to Gardner ROTI®Calipure

The light yellow Gardner colour numbers 1-8 are based on potassium chloroplatinate solutions, the colour numbers 9-18 on iron(III) chloride, cobalt(II) chloride and hydrochloric acid solutions. They can be used to determine the colour number of similarly coloured liquids, such as vegetable oils or mineral oils.
Our colour standards according to Gardner are prepared from high-quality reagents by weighing (weight %). The standards are checked by means of a spectrophotometer.
The batch specific Certificates of Analysis are available online.

Properties:

- Calibration and/or quality control standard
- Consistently high quality from batch to batch
- *Ready-to-use*

Colour Standards Gardner ROTI®Calipure

Product name	Brand/Purity	Art. No.	Pack Qty.	€	€
Colour Standard	ROTI®Calipure Gardner 1	**1HT7.1**	100 ml	~~205,00~~	**164,00**
	ROTI®Calipure Gardner 2	**1HT8.1**	100 ml	~~142,90~~	**114,30**
	ROTI®Calipure Gardner 3	**1HT9.1**	100 ml	~~112,50~~	**90,00**
	ROTI®Calipure Gardner 4	**1HTA.1**	100 ml	~~142,90~~	**114,30**
	ROTI®Calipure Gardner 5	**1HTC.1**	100 ml	~~112,50~~	**90,00**
	ROTI®Calipure Gardner 6	**1HTE.1**	100 ml	~~142,90~~	**114,30**
	ROTI®Calipure Gardner 7	**1HTH.1**	100 ml	~~112,50~~	**90,00**
	ROTI®Calipure Gardner 8	**1HTK.1**	100 ml	~~142,90~~	**114,30**
	ROTI®Calipure Gardner 9	**1HTL.1**	100 ml	~~112,50~~	**90,00**
	ROTI®Calipure Gardner 10	**1HTN.1**	100 ml	~~112,50~~	**90,00**
	ROTI®Calipure Gardner 11	**1HTP.1**	100 ml	~~112,50~~	**90,00**
	ROTI®Calipure Gardner 12	**1HTT.1**	100 ml	~~142,90~~	**114,30**
	ROTI®Calipure Gardner 13	**1HTX.1**	100 ml	~~205,00~~	**164,00**
	ROTI®Calipure Gardner 14	**1HTY.1**	100 ml	~~142,90~~	**114,30**
	ROTI®Calipure Gardner 15	**1HX0.1**	100 ml	~~112,50~~	**90,00**
	ROTI®Calipure Gardner 16	**1HX1.1**	100 ml	~~142,90~~	**114,30**
	ROTI®Calipure Gardner 17	**1HX2.1**	100 ml	~~112,50~~	**90,00**
	ROTI®Calipure Gardner 18	**1HX3.1**	100 ml	~~112,50~~	**90,00**

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

Colour Standards according to Saybolt ROTI®Calipure

The Saybolt scale is used for the evaluation of water-clear, colourless to slightly yellowish liquids, such as paraffins or mineral oils.
Our colour standards according to Saybolt are prepared from high-quality reagents by weighing (weight %). The standards are checked by means of a spectrophotometer.
The batch specific Certificates of Analysis are available online.

Properties:

- Calibration and/or quality control standard
- Consistently high quality from batch to batch
- *Ready-to-use*

Colour Standards Saybolt ROTI®Calipure

Product name	Brand/Purity	Art. No.	Pack Qty.	€	€
Colour Standard	ROTI®Calipure Saybolt +30	**1KNH.1**	100 ml	~~78,50~~	**62,80**
	ROTI®Calipure Saybolt +25	**1KNK.1**	100 ml	~~142,90~~	**114,30**
	ROTI®Calipure Saybolt +19	**1KNL.1**	100 ml	~~142,90~~	**114,30**
	ROTI®Calipure Saybolt +15	**1KNN.1**	100 ml	~~78,50~~	**62,80**
	ROTI®Calipure Saybolt +12	**1KNP.1**	100 ml	~~142,90~~	**114,30**
	ROTI®Calipure Saybolt +0	**1KNT.1**	100 ml	~~142,90~~	**114,30**
	ROTI®Calipure Saybolt -15	**1KNX.1**	100 ml	~~142,90~~	**114,30**

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

Calibration and Control Standards ROTI®Calipure

-20 %

Density standards ROTI®Calipure

Our Density standards are made of high-quality reagents and are tested by Bingham Pycnometer. They can be used with any brand or type of density measuring instrument. The batch specific Certificates of Analysis are available online.

Properties:

- No toxic metals are used in the products
- Calibration standard for density measurement by pycnometric, vibrational or hydrometer based techniques
- Usable with any brand or type of density measuring instrument
- Consistently high quality from batch to batch
- For testing of Density or Relative Density

Density Standards ROTI®Calipure

Product name	Purity	Pack.	Art. No.	Pack Qty.	€	€
Density Standard	0,6919 g/ml (20 °C)	glass	**2951.1**	100 ml	~~99,90~~	**79,90**
	0,7033 g/ml (20 °C)	glass	**2964.1**	100 ml	~~99,90~~	**79,90**
	0,8668 g/ml (20 °C)	glass	**2965.1**	100 ml	~~99,90~~	**79,90**
	1,0005 g/ml (20 °C)	glass	**2966.1**	100 ml	~~99,90~~	**79,90**
	1,0301 g/ml (20 °C)	glass	**2971.1**	100 ml	~~239,00~~	**190,90**
	1,0792 g/ml (20 °C)	glass	**2972.1**	100 ml	~~239,00~~	**190,90**
	1,1651 g/ml (20 °C)	glass	**2973.1**	100 ml	~~239,00~~	**190,90**
	1,2486 g/ml (20 °C)	glass	**2974.1**	100 ml	~~239,00~~	**190,90**
	1,3304 g/ml (20 °C)	glass	**2976.1**	100 ml	~~239,00~~	**190,90**
	1,7470 g/ml (20 °C)	glass	**2979.1**	100 ml	~~239,00~~	**190,90**

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

Viscosity standards ROTI®Calipure

Our viscosity standards are manufactured from high-quality reagents and tested using Ubbelohde Master Viscometers. All standards are tested for kinematic viscosity (mm²/s, cSt) as well as dynamic viscosity (mPa·s, cP) and density (g/ml) at different temperatures up to 100 °C. They can be used for calibration, control, verification, qualification or method validation of kinematic and dynamic viscosity.
The batch specific Certificates of Analysis are available online.

Viscosity Standards ROTI®Calipure

Product name	Purity	Pack.	Art. No.	Pack Qty.	€	€
Standard for Viscosity S3	4,5 cSt (20 °C)	glass	**3385.1**	500 ml	~~144,90~~	**115,90**
Standard for Viscosity S6	10 cSt (20 °C)	glass	**3387.1**	500 ml	~~144,90~~	**115,90**
Standard for Viscosity N10	22 cSt (20 °C)	glass	**3342.1**	500 ml	~~144,90~~	**115,90**
Standard for Viscosity S20	43 cSt (20 °C)	glass	**3360.1**	500 ml	~~144,90~~	**115,90**
Standard for Viscosity N35	88 cSt (20 °C)	glass	**3349.1**	500 ml	~~144,90~~	**115,90**
Standard for Viscosity S60	160 cSt (20 °C)	glass	**3388.1**	500 ml	~~144,90~~	**115,90**
Standard for Viscosity N75	210 cSt (20 °C)	glass	**3356.1**	500 ml	~~144,90~~	**115,90**
Standard for Viscosity N100	320 cSt (20 °C)	glass	**3344.1**	500 ml	~~144,90~~	**115,90**
Standard for Viscosity S200	540 cSt (20 °C)	glass	**3366.1**	500 ml	~~144,90~~	**115,90**
Standard for Viscosity N250	790 cSt (20 °C)	glass	**3345.1**	500 ml	~~144,90~~	**115,90**

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

Acids and Bases for Analysis (p.a.)

-20 %

Top Products

Product name	Purity	Pack.	Art. No.	Pack Qty.	€	€
Acetic acid	100 %, p.a.	glass	**3738.1**	1 l	~~29,90~~	**22,40**
		plastic	**3738.4**	1 l	~~27,90~~	**20,90**
		glass	**3738.2**	2.5 l	~~64,90~~	**48,65**
		plastic	**3738.5**	2.5 l	~~62,90~~	**46,90**
			3738.6	5 l	~~109,00~~	**81,75**
			3738.3	10 l	~~195,00~~	**146,25**
Ammonia solution	≥25 %, p.a.	glass	**6774.1**	1 l	~~24,90~~	**18,65**
			6774.2	2.5 l	~~36,90~~	**27,65**
		plastic	**6774.3**	5 l	~~55,90~~	**41,90**
Citric acid	≥99,5 %, p.a., ACS, anhydrous	plastic	**X863.1**	500 g	~~21,90~~	**16,40**
			X863.2	1 kg	~~34,50~~	**25,85**
			X863.3	2.5 kg	~~69,90~~	**52,40**
			X863.4	5 kg	~~112,50~~	**84,35**
			X863.6	10 kg	~~205,00~~	**153,75**
			X863.5	25 kg	~~429,00~~	**321,75**
Formic acid	≥98 %, p.a., ACS	glass	**4724.3**	500 ml	~~21,90~~	**16,40**
			4724.1	1 l	~~38,90~~	**28,90**
			4724.2	2.5 l	~~79,90~~	**59,90**
		PE/steel	**4724.4**	10 l	~~255,00~~	**191,25**
			4724.5	25 l	~~509,00~~	**381,75**
Nitric acid	≥65 %, p.a., ISO	glass	**4989.3**	250 ml	~~20,90~~	**15,65**
			4989.1	1 l	~~37,90~~	**28,40**
			4989.2	2.5 l	~~77,90~~	**58,40**
		plastic	**4989.4**	2.5 l	~~75,90~~	**56,90**
Periodic acid	≥99 %, p.a.	glass	**3257.3**	50 g	~~39,90~~	**29,90**
			3257.1	100 g	~~75,90~~	**56,90**
			3257.2	500 g	~~259,00~~	**194,25**
			3257.4	1 kg	~~469,00~~	**351,75**
Sodium hydroxide	≥98 %, p.a., ISO, in pellets	plastic	**6771.3**	500 g	~~18,90~~	**13,90**
			6771.1	1 kg	~~29,50~~	**21,90**
			6771.4	2.5 kg	~~69,90~~	**52,40**
			6771.2	5 kg	~~106,50~~	**79,85**
			6771.6	10 kg	~~239,00~~	**179,25**
			6771.5	25 kg	~~419,00~~	**314,25**
Sodium hydroxide solution	≥32 %, p.a.	plastic	**T196.1**	1 l	~~31,90~~	**23,90**
			T196.2	2.5 l	~~61,90~~	**46,40**
			T196.3	5 l	~~99,50~~	**74,60**
			T196.7	25 l	~~375,00~~	**281,25**
Sulphuric acid	96 %, p.a., ISO	glass	**4623.3**	250 ml	~~20,50~~	**15,35**
			4623.1	1 l	~~34,90~~	**25,90**
		plastic	**4623.4**	1 l	~~32,90~~	**24,65**
		glass	**4623.2**	2.5 l	~~70,90~~	**52,90**
		plastic	**4623.5**	2.5 l	~~72,90~~	**54,65**
			4623.6	10 l	~~139,00~~	**104,25**

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

Salts for Analysis

-30 %

Ammonium chloride
≥99,7 %, p.a., Ultra Quality

Reagent for photography, buffer substance, molecularbiology, mixtures cryogens.

Warning H302-H319

Art. No.	Pack Qty.	Pack.	€	€
K298.1	500 g	plastic	~~25,90~~	**17,90**
K298.2	1 kg	plastic	~~43,50~~	**30,45**
K298.3	2.5 kg	plastic	~~69,90~~	**48,90**
K298.4	5 kg	plastic	~~99,00~~	**69,30**
K298.6	10 kg	plastic	~~162,50~~	**113,75**
K298.5	25 kg	plastic	~~319,00~~	**223,30**

Potassium chloride
≥99,5 %, p.a., ACS, ISO

Reagent for buffer solutions, for molecular biology.

Art. No.	Pack Qty.	Pack.	€	€
6781.3	500 g	plastic	~~19,90~~	**13,90**
6781.1	1 kg	plastic	~~28,90~~	**20,20**
6781.2	5 kg	plastic	~~115,00~~	**80,50**
6781.5	25 kg	plastic	~~439,00~~	**307,30**

Sodium chloride
≥99,5 %, p.a., ACS, ISO

For freezing mixtures, salting-out soap, molecular biology.

Art. No.	Pack Qty.	Pack.	€	€
3957.3	500 g	plastic	~~16,50~~	**11,55**
3957.1	1 kg	plastic	~~18,90~~	**13,20**
3957.2	5 kg	plastic	~~69,90~~	**48,90**
3957.4	10 kg	plastic	~~105,90~~	**73,90**
3957.5	25 kg	plastic	~~209,50~~	**146,65**

further Salts in p.a. Quality

-20 %

Product name	Purity	Art. No.	Pack Qty.	€	€
Ammonium heptamolybdate tetrahydrate	≥99 %, p.a.	**3666.1**	250 g	~~96,90~~	**77,50**
		3666.2	500 g	~~169,00~~	**134,90**
		3666.3	1 kg	~~309,00~~	**246,90**
		3666.7	25 kg	~~3.225,00~~	**2.580,00**
Ammonium sulphate	≥99,5 %, p.a., ACS, ISO	**3746.2**	250 g	~~14,50~~	**11,60**
		3746.1	1 kg	~~32,50~~	**26,00**
		3746.3	2.5 kg	~~59,50~~	**47,60**
		3746.4	5 kg	~~104,50~~	**83,60**
		3746.6	10 kg	~~167,50~~	**134,00**
		3746.5	25 kg	~~355,00~~	**284,00**
Caesium chloride	≥99,999 %, p.a., Ultra Quality	**8627.4**	10 g	~~24,90~~	**19,90**
		8627.3	50 g	~~61,90~~	**49,50**
		8627.1	100 g	~~105,00~~	**84,00**
		8627.5	250 g	~~195,00~~	**156,00**
		8627.2	1 kg	~~719,00~~	**575,20**
Calcium chloride dihydrate	≥99 %, p.a., ACS	**5239.2**	500 g	~~18,90~~	**14,90**
		5239.1	1 kg	~~26,90~~	**21,50**
		5239.3	2.5 kg	~~56,90~~	**45,50**
Copper(II) sulphate pentahydrate	≥99,5 %, p.a., ACS, ISO	**P024.1**	500 g	~~30,90~~	**24,70**
		P024.2	1 kg	~~52,90~~	**42,30**
		P024.3	2.5 kg	~~99,50~~	**79,60**
Lithium chloride	≥99 %, p.a., Ultra Quality	**3739.1**	250 g	~~85,90~~	**68,70**
		3739.2	1 kg	~~289,00~~	**230,90**
Magnesium chloride hexahydrate	≥99 %, p.a., ACS	**2189.2**	250 g	~~16,90~~	**13,50**
		2189.1	1 kg	~~32,90~~	**26,30**
		2189.3	2.5 kg	~~60,90~~	**48,70**
		2189.5	25 kg	~~459,00~~	**366,90**
Nickel(II) sulphate hexahydrate	≥99 %, p.a., ACS	**T111.1**	250 g	~~71,90~~	**57,50**
		T111.2	1 kg	~~249,00~~	**198,90**
di-Potassium hydrogen phosphate	≥99 %, p.a., anhydrous	**P749.1**	500 g	~~31,90~~	**25,50**
		P749.2	1 kg	~~57,90~~	**46,30**
		P749.3	2.5 kg	~~117,50~~	**94,00**
		P749.5	25 kg	~~959,00~~	**767,20**

Product name	Purity	Art. No.	Pack Qty.	€	€
Potassium iodide	≥99,5 %, p.a., ISO	**6750.4**	50 g	~~22,90~~	**18,30**
		6750.1	250 g	~~90,90~~	**72,70**
		6750.3	500 g	~~169,00~~	**134,90**
		6750.2	1 kg	~~319,00~~	**254,90**
		6750.5	2.5 kg	~~629,00~~	**502,90**
		6750.6	5 kg	~~1.190,00~~	**952,00**
Rubidium chloride	≥99 %, p.a.	**4471.2**	5 g	~~39,90~~	**31,90**
		4471.1	10 g	~~68,90~~	**54,90**
		4471.3	25 g	~~142,50~~	**114,00**
		4471.4	50 g	~~269,00~~	**214,90**
Sodium acetate trihydrate	≥99,5 %, p.a., ACS, ISO	**6779.2**	500 g	~~26,50~~	**20,90**
		6779.1	1 kg	~~49,90~~	**39,90**
		6779.3	5 kg	~~165,00~~	**132,00**
		6779.5	25 kg	~~695,00~~	**556,00**
Sodium azide	≥99 %, p.a.	**K305.1**	100 g	~~51,90~~	**41,50**
		K305.2	250 g	~~99,90~~	**79,90**
		K305.3	500 g	~~179,00~~	**142,90**
		K305.4	1 kg	~~299,00~~	**238,90**
di-Sodium hydrogen phosphate	≥99 %, p.a., ACS, anhydrous	**P030.1**	500 g	~~34,50~~	**27,60**
		P030.2	1 kg	~~56,90~~	**45,50**
		P030.3	2.5 kg	~~115,00~~	**92,00**
di-Sodium hydrogen phosphate dihydrate	≥99,0 %, p.a.	**4984.2**	500 g	~~29,50~~	**23,60**
		4984.1	1 kg	~~49,50~~	**39,60**
		4984.3	2.5 kg	~~99,50~~	**79,60**
		4984.4	5 kg	~~152,50~~	**122,00**
		4984.5	10 kg	~~255,00~~	**204,00**
		4984.7	25 kg	~~445,00~~	**356,00**
Sodium sulphate	≥99 %, p.a., ACS, ISO, anhydrous, powdered	**8560.3**	500 g	~~27,50~~	**22,00**
		8560.1	1 kg	~~39,50~~	**31,60**
		8560.2	5 kg	~~149,00~~	**119,20**
		8560.5	25 kg	~~609,00~~	**486,90**

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

Metals for Analysis (p.a.) -20 %

Product name	Purity	Art. No.	Pack Qty.	€	€
Copper foil	p.a.	**1KNE.1**	250 g	~~44,90~~	**35,90**
		1KNE.2	1 kg	~~99,90~~	**79,90**
Copper powder	≥99,7 %, p.a., <63 µm	**CP21.1**	100 g	~~18,50~~	**14,80**
		CP21.2	500 g	~~58,50~~	**46,80**
Indium powder	≥99 %, p.a.	**1EHP.1**	5 g	~~48,50~~	**38,80**
		1EHP.2	25 g	~~183,50~~	**146,80**
Iodine	≥99,8 %, p.a., ACS, resublimated	**X864.1**	100 g	~~72,90~~	**58,30**
		X864.2	250 g	~~131,50~~	**105,20**
		X864.3	1 kg	~~459,00~~	**366,90**
Iron powder	≥99,5 %, p.a., ~10 µm	**3718.3**	100 g	~~20,90~~	**16,70**
		3718.1	250 g	~~38,50~~	**30,80**
		3718.4	1 kg	~~99,90~~	**79,90**
		3718.2	2.5 kg	~~209,00~~	**166,90**
Mercury	≥99,9995 %, p.a.	**8530.1**	100 g	~~45,50~~	**36,40**
		8530.2	1 kg	~~225,00~~	**180,00**
Tin granules	≥99,8 %, p.a., ~1-4 mm	**4016.2**	50 g	~~48,50~~	**38,80**
		4016.1	250 g	~~179,00~~	**142,90**
Zinc granules	≥99,99 %, p.a., 0,3–1,5 mm	**3093.1**	100 g	~~35,90~~	**28,70**
		3093.2	250 g	~~81,90~~	**65,50**
		3093.3	500 g	~~151,50~~	**121,20**
	≥99,99 %, p.a., 5–15 mm	**AE99.1**	250 g	~~35,50~~	**28,40**
		AE99.2	500 g	~~59,50~~	**47,60**
		AE99.3	1 kg	~~99,50~~	**79,60**

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

Further Metals

New in the range NEW

Product name	Purity	Art. No.	Pack Qty.	€	€
Antimony powder	≥99,5 %	**1HX4.1**	100 g	~~37,90~~	**30,30**
		1HX4.2	250 g	~~70,50~~	**56,40**
		1HX4.3	500 g	~~129,00~~	**103,20**
Gallium	99,99 %	**1HN8.1**	5 g	~~29,90~~	**23,90**
		1HN8.2	10 g	~~44,90~~	**35,90**
		1HN8.3	25 g	~~89,90~~	**71,90**
Indium wire	99,99 %, Ø 0,5 mm	**1HN9.1**	25 cm	~~20,90~~	**16,70**
		1HN9.2	50 cm	~~31,50~~	**24,90**
		1HN9.3	1 m	~~52,90~~	**42,30**
Lithium	≥99,5 %, Ø 70 mm, h: 55 mm	**1HEA.1**	100 g	~~189,00~~	**150,90**
Manganese powder	≥99,6 %, <100 mesh	**1HX8.1**	50 g	~~36,90~~	**29,50**
		1HX8.2	100 g	~~57,90~~	**46,30**
		1HX8.3	250 g	~~115,00~~	**92,00**
Tin foil	98 % Sn, 2 % Sb, pure	**1L7Y.1**	250 g	~~69,00~~	**55,20**
Vanadium powder	99,5 %	**1HT6.1**	5 g	~~26,50~~	**20,90**
		1HT6.2	25 g	~~84,50~~	**67,60**

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

Indicators and Dyes

-20 %

Novelties NEW

Allura red (C. I. 16035)
extra pure

red, water soluble azo dye

Art. No.	Pack Qty.	Pack.	€	€
1H3X.1	10 g	glass	~~16,90~~	13,50
1H3X.2	25 g	glass	~~29,90~~	23,90
1H3X.3	100 g	glass	~~59,90~~	47,90

Amaranth (C. I. 16185)
extra pure

red, water soluble azo dye

Art. No.	Pack Qty.	Pack.	€	€
1H3Y.1	10 g	glass	~~16,90~~	13,50
1H3Y.2	25 g	glass	~~29,90~~	23,90
1H3Y.3	100 g	glass	~~59,90~~	47,90

Calmagite
extra pure

Indicator for determination of Ca and Mg with EDTA

Warning H315-H319-H335

Art. No.	Pack Qty.	Pack.	€	€
1H59.1	5 g	glass	~~19,90~~	15,90
1H59.2	10 g	glass	~~34,90~~	27,90
1H59.3	25 g	glass	~~69,90~~	55,90

Chrome azurol S (C. I. 43825)
extra pure

Indicator for metal ions

Warning H315-H319-H335

Art. No.	Pack Qty.	Pack.	€	€
1H43.1	1 g	glass	~~16,90~~	13,50
1H43.2	10 g	glass	~~35,90~~	28,70
1H43.3	25 g	glass	~~67,90~~	54,30

New fuchsin (C. I. 42520)
extra pure

Dye and detection reagent for aldehydes

Warning H315-H319-H335-H351

Art. No.	Pack Qty.	Pack.	€	€
1H5E.1	25 g	glass	~~24,90~~	19,90
1H5E.2	50 g	glass	~~39,90~~	31,90
1H5E.3	100 g	glass	~~64,90~~	51,90

Pararosaniline base (C. I. 42500)
extra pure

Dye and detection reagent for aldehydes

Warning H351

Art. No.	Pack Qty.	Pack.	€	€
1H5L.1	5 g	glass	~~19,90~~	15,90
1H5L.2	10 g	glass	~~34,90~~	27,90
1H5L.3	25 g	glass	~~59,00~~	47,20

Patent blue VF (C. I. 42045)
extra pure

Vital staining

Art. No.	Pack Qty.	Pack.	€	€
1H5N.1	10 g	glass	~~19,90~~	15,90
1H5N.2	25 g	glass	~~34,90~~	27,90
1H5N.3	100 g	glass	~~79,90~~	63,90

Resazurin sodium salt
extra pure

Redocindicator, indicator pH 5-7, reagent for hyposulphites

Art. No.	Pack Qty.	Pack.	€	€
1H5X.1	1 g	glass	~~23,90~~	18,90
1H5X.2	5 g	glass	~~65,90~~	52,70
1H5X.3	10 g	glass	~~119,00~~	95,20

Sudan I (C. I. 12055)
extra pure

Fat-soluble azo dye

Warning H317-H341-H351-H413

Art. No.	Pack Qty.	Pack.	€	€
1H5Y.1	25 g	glass	~~19,90~~	15,90
1H5Y.2	100 g	glass	~~44,90~~	35,90

Thymolphthalein complexon
p.a.

Indicator for metal ions

Art. No.	Pack Qty.	Pack.	€	€
1H60.1	5 g	glass	~~19,90~~	15,90
1H60.2	10 g	glass	~~34,90~~	27,90
1H60.3	25 g	glass	~~69,90~~	55,90

Victoria blue B (C. I. 44045)
extra pure

blue violet dye

Danger H302-H319-H341-H350

Art. No.	Pack Qty.	Pack.	€	€
1H61.1	10 g	glass	~~17,90~~	14,30
1H61.2	25 g	glass	~~34,90~~	27,90
1H61.3	100 g	glass	~~99,00~~	79,20

Top seller

Bromothymol blue
p.a., ACS

Indicator pH 6.0-7.6

Art. No.	Pack Qty.	Pack.	€	€
T117.1	5 g	glass	~~26,90~~	21,50
T117.2	25 g	glass	~~64,50~~	51,60
T117.3	50 g	glass	~~107,50~~	86,00
T117.7	100 g	glass	~~189,00~~	150,90

Fluorescein disodium salt (C.I. 45350)
extra concentrated

For source staining and for the study of water current.

Art. No.	Pack Qty.	Pack.	€	€
5283.3	25 g	plastic	~~23,90~~	18,90
5283.1	100 g	plastic	~~39,50~~	31,60
5283.2	500 g	plastic	~~129,00~~	103,20

Nile red
extra pure

Fluorescent dye

Art. No.	Pack Qty.	Pack.	€	€
7726.1	1 g	glass	~~42,90~~	34,30
7726.2	5 g	glass	~~169,00~~	134,90
7726.3	10 g	glass	~~319,00~~	254,90

ROTI®Star Standards for AAS and ICP

A selection from our range

-20 %

Single Element Standards for AAS

Product name	Art. No.	Pack Qty.	€	€
Calcium AAS Standard Solution	**2240.1**	100 ml	~~22,90~~	**18,30**
	2240.2	500 ml	~~39,50~~	**31,60**
Copper AAS Standard Solution	**2329.1**	100 ml	~~22,90~~	**18,30**
	2329.2	500 ml	~~39,50~~	**31,60**
Gold AAS Standard Solution	**2258.1**	100 ml	~~91,50~~	**73,20**
	2258.2	500 ml	~~225,00~~	**180,00**
Iron AAS Standard Solution	**2252.1**	100 ml	~~22,90~~	**18,30**
	2252.2	500 ml	~~39,50~~	**31,60**
Lead AAS Standard Solution	**2228.1**	100 ml	~~22,90~~	**18,30**
	2228.2	500 ml	~~39,50~~	**31,60**
Magnesium AAS Standard Solution	**2333.1**	100 ml	~~22,90~~	**18,30**
	2333.2	500 ml	~~39,50~~	**31,60**
Scandium AAS Standard Solution	**2347.1**	100 ml	~~89,90~~	**71,90**
	2347.2	500 ml	~~249,00~~	**198,90**
Zinc AAS Standard Solution	**2383.1**	100 ml	~~22,90~~	**18,30**
	2383.2	500 ml	~~39,50~~	**31,60**

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

Single Element Standards for ICP-OES

Product name	Element	Purity	Matrix	Art. No.	Pack Qty.	€	€
Calcium ICP Standard Solution	Calcium (Ca)	1 000 mg/l Ca	2 % HNO_3	**2407.1**	100 ml	~~59,90~~	**47,90**
				2407.3	250 ml	~~84,90~~	**67,90**
				2407.2	500 ml	~~129,00~~	**103,20**
	Calcium (Ca)	10 000 mg/l Ca	2 % HNO_3	**2503.1**	100 ml	~~105,90~~	**84,70**
				2503.2	500 ml	~~229,00~~	**182,90**
Copper ICP Standard Solution	Copper (Cu)	1 000 mg/l Cu	2–3 % HNO_3	**2426.1**	100 ml	~~59,90~~	**47,90**
				2426.2	250 ml	~~99,50~~	**79,60**
	Copper (Cu)	10 000 mg/l Cu	2–3 % HNO_3	**2520.1**	100 ml	~~105,90~~	**84,70**
Iron ICP Standard Solution	Iron (Fe)	1 000 mg/l Fe	2–4 % HNO_3	**2412.1**	100 ml	~~59,90~~	**47,90**
				2412.3	250 ml	~~87,90~~	**70,30**
				2412.2	500 ml	~~129,00~~	**103,20**
	Iron (Fe)	10 000 mg/l Fe	2–4 % HNO_3	**2508.1**	100 ml	~~105,90~~	**84,70**
				2508.2	500 ml	~~229,00~~	**182,90**
Palladium ICP Standard Solution	Palladium (Pd)	1 000 mg/l Pd	3–4 % HNO_3	**2447.1**	100 ml	~~219,00~~	**174,90**
				2447.2	250 ml	~~529,00~~	**422,90**
	Palladium (Pd)	10 000 mg/l Pd	3–4 % HNO_3	**2532.1**	100 ml	~~1.125,00~~	**900,00**
Phosphorus ICP Standard Solution	Phosphorus (P)	1 000 mg/l P	H_2O	**2451.1**	100 ml	~~59,90~~	**47,90**
				2451.2	250 ml	~~99,50~~	**79,60**
	Phosphorus (P)	10 000 mg/l P	H_2O	**2534.1**	100 ml	~~105,90~~	**84,70**
Platinum ICP Standard Solution	Platinum (Pt)	1 000 mg/l Pt	10 % HCl	**2448.1**	100 ml	~~229,00~~	**182,90**
				2448.2	250 ml	~~569,00~~	**454,90**
	Platinum (Pt)	10 000 mg/l Pt	10 % HCl	**2533.1**	100 ml	~~995,00~~	**796,00**
Potassium ICP Standard Solution	Potassium (K)	1 000 mg/l K	2 % HNO_3	**2425.1**	100 ml	~~59,90~~	**47,90**
				2425.3	250 ml	~~87,90~~	**70,30**
				2425.2	500 ml	~~129,00~~	**103,20**
	Potassium (K)	10 000 mg/l K	2 % HNO_3	**2519.1**	100 ml	~~105,90~~	**84,70**
				2519.2	500 ml	~~229,00~~	**182,90**
Rhodium ICP Standard Solution	Rhodium (Rh)	1 000 mg/l Rh	5 % HCl	**2455.2**	30 ml	~~229,00~~	**182,90**
				2455.1	100 ml	~~459,00~~	**366,90**
Sodium ICP Standard Solution	Sodium (Na)	1 000 mg/l Na	2 % HNO_3	**2439.1**	100 ml	~~59,90~~	**47,90**
				2439.3	250 ml	~~84,90~~	**67,90**
				2439.2	500 ml	~~129,00~~	**103,20**
	Sodium (Na)	10 000 mg/l Na	2 % HNO_3	**2527.1**	100 ml	~~105,90~~	**84,70**
				2527.2	500 ml	~~229,00~~	**182,90**
Zinc ICP Standard Solution	Zinc (Zn)	1 000 mg/l Zn	2–3 % HNO_3	**2485.1**	100 ml	~~59,90~~	**47,90**
				2485.3	250 ml	~~84,90~~	**67,90**
				2485.2	500 ml	~~129,00~~	**103,20**
	Zinc (Zn)	10 000 mg/l Zn	5 % HNO_3	**2576.1**	100 ml	~~105,90~~	**84,70**
				2576.2	500 ml	~~229,00~~	**182,90**

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

ROTI®Star Element Standards for ICP

-20 %

Multi Element Standards for ICP-OES

Product name	Number of elements	Composition	Matrix	Art. No.	Pack Qty.	€	€
ICP Multi-Element Standard Solution IV (23 elements, 1000 mg/l)	23	Ag, Al, B, Ba, Bi, Ca, Cd, Co, Cr, Cu, Fe, Ga, In, K, Li, Mg, Mn, Na, Ni, Pb, Sr, Tl, Zn	2 % HNO_3	**2638.1**	100 ml	~~309,00~~	**246,90**
ICP Multi-Element Standard Solution VIII (24 elements, 100 mg/l)	24	Al, B, Ba, Be, Bi, Ca, Cd, Co, Cr, Cu, Fe, Ga, K, Li, Mg, Mn, Na, Ni, Pb, Se, Sr, Te, Tl, Zn	2 % HNO_3	**2639.1**	100 ml	~~295,00~~	**236,00**
ICP Multi-Element Standard Solution X (23 elements, concentration in µg/l)	23	Ca (35000), Mg (15000), Na (8000), K (3000), B (100), Fe (100), Mo (100), Sr (100), As (50), Ba (50), Ni (50), V (50), Zn (50), Mn (30), Co (25), Pb (25), Be (20), Cd (20), Cr (20), Cu (20), Bi (10), Se (10), Tl (10)	2 % HNO_3	**2642.1**	100 ml	~~285,00~~	**228,00**
ICP Multi-Element Standard Solution XVI (21 elements, 100 mg/l)	21	As, Be, Ca, Cd, Co, Cr, Cu, Fe, Li, Mg, Mn, Mo, Ni, Pb, Sb, Se, Sr, Ti, Tl, V, Zn	2 % HNO_3	**2645.1**	100 ml	~~285,00~~	**228,00**
ICP Multi-Element Standard Solution A (24 elements, concentration in mg/l)	24	Al (1000), As (100), B (500), Ba (500), Ca (1000), Cd (100), Co (500), Cr (500), Cu (500), Fe (1000), Hg (10), K (1000), Li (100), Mg (1000), Mn (500), Na (1000), Ni (500), Pb (500), Rb (500), Sr (500), Te (500), Ti (500), V (500), Zn (500)	5 % HNO_3	**8248.1**	100 ml	~~595,00~~	**476,00**
ICP Multi-Element Standard Solution (28 elements, 1 mg/l)	28	Al, Ag, As, B, Ba, Be, Bi, Ca, Cd, Co, Cr, Cu, Fe, K, Li, Mg, Mn, Mo, Na, Ni, Pb, Sb, Se, Sr, Ti, Tl, V, Zn	5 % HNO_3	**2649.1**	100 ml	~~95,90~~	**76,70**
ICP Multi-Element Standard Solution (28 elements, 100 mg/l)	28	Al, Ag, As, B, Ba, Be, Bi, Ca, Cd, Co, Cr, Cu, Fe, K, Li, Mg, Mn, Mo, Na, Ni, Pb, Sb, Se, Sr, Ti, Tl, V, Zn	5 % HNO_3	**2650.1**	100 ml	~~329,00~~	**262,90**

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

Multi Element Standards for ICP-MS

Product name	Number of elements	Composition	Art. No.	Pack Qty.	€	€
ICP-MS Tuning Solution (6 elements, 1 µg/l)	6	Ce, Co, Li, Mg, Tl, Y	**6806.1**	100 ml	~~127,50~~	**102,00**
			6806.2	500 ml	~~235,00~~	**188,00**
ICP-MS Tuning Solution A (6 elements, concentration in µg/l)	6	Be (10), Bi (2), Ce (2), Co (5), In (2), Mn (5)	**0900.2**	250 ml	~~289,00~~	**230,90**
ICP-MS Tuning Solution B (6 elements, concentration in µg/l)	6	Be (1000), Bi (200), Ce (200), Co (500), In (200), Mn (500)	**0902.1**	100 ml	~~209,00~~	**166,90**
ICP-MS Multi-Element Standard Solution (10 elements, 10 mg/l)	10	Au, Hf, Ir, Pd, Pt, Rh, Ru, Sb, Sn, Te	**0429.1**	100 ml	~~125,00~~	**100,00**
ICP-MS Multi-Element Standard Solution (12 elements, concentration in mg/l)	12	As (2,5), Ba (2,5), Cd (0,5), Cr (5), Cu (5), Hg (0,2), Mo (3), Ni (5), Pb (5), Sb (0,5), Se (0,7), Zn (5)	**6810.1**	100 ml	~~172,50~~	**138,00**
ICP-MS Multi-Element Standard Solution (21 elements, 100 mg/l)	21	Al, Ag, As, Ba, Be, Cd, Co, Cr, Cu, Fe, K, Mn, Mo, Ni, Pb, Sb, Se, Sn, Tl, V, Zn	**6811.1**	100 ml	~~285,00~~	**228,00**
ICP-MS Multi-Element Standard Solution (28 elements, 10 mg/l)	28	Ag, Al, As, Ba, Be, Bi, Ca, Cd, Co, Cr, Cs, Cu, Fe, Ga, In, K, Li, Mg, Mn, Na, Ni, Pb, Rb, Se, Sr, Tl, V, Zn	**6802.1**	100 ml	~~529,00~~	**422,90**
ICP-MS Multi-Element Standard Solution VI (30 elements, concentration in mg/l)	30	Ag (10), Al (10), As (100), B (100), Ba (10), Be (100), Bi (10), Ca (1000), Cd (10), Co (10), Cr (10), Cu (10), Fe (100), Ga (10), K (10), Li (10), Mg (10), Mn (10), Mo (10), Na (10), Ni (10), Pb (10), Rb (10), Se (100), Sr (10), Te (10), Tl (10), U (10), V (10), Zn (100)	**1L4K.1**	100 ml	~~689,00~~	**551,20**

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

► For further multi-element **standards for ICP-OES and ICP-MS** see our current catalogue or at www.carlroth.pl

► We are offering you our **ROTI®Star multi-element standard solutions as custom-made special products** in all common container sizes.

Determination of the Hydrocarbon Index

-20 %

The hydrocarbon index is defined as the total of all organic substances that can be extracted with hexane, but cannot be adsorbed in Florisil® (magnesium silicate). On a covalent GC column, these elute between *n*-decane and *n*-tetracontane and have a boiling range of 175–525 °C. These include heating oils, diesel fuels, kerosene, lubricants and transmission fluids. Petrols are not detected using this method. Carl ROTH offers an extensive range of products for the determination of the hydrocarbon index in accordance with **EN ISO 9377-2-Mod. (DIN H53).**

Standards
According to **EN ISO 9377-2-Mod. (DIN H53)**

- Manufactured in accordance with **ISO 17034** in an accredited environment
- Tested in a laboratory accredited to **ISO/IEC 17025**
- Ideal for calibration of GC-FID, GC-TCD, GC-ECD, GC-MS, GC-MS/MS, LC-UV, LC-MS and LC-MS/MS
- With an detailed, batch-related certificate of analysis

Determination of the Hydrocarbon Index

NEW / +

Product name	Purity	Pack.	Art. No.	Pack Qty.	€	€
n-Alkane standard solution (C_{10}–C_{40}, all even)	16 components (each 50 mg/l) in *n*-hexane	glass ampoule	**1772.1**	1 ml	~~119,00~~	**95,20**
			1772.2	5 ml	~~179,00~~	**142,90**
	16 components (each 100 mg/l) in *n*-hexane/petroleum ether	glass ampoule	**9331.1**	5 ml	~~225,00~~	**180,00**
n-Alkane standard solution (C_7, C_8, C_9, C_{10}–C_{40}, all even)	19 components (each 50 mg/l) in isooctane	glass ampoule	**9629.1**	5 ml	~~199,00~~	**158,90**
Extraction solvent stock solution	20 µl/l *n*-decane and 20 mg/l *n*-tetracontane in *n*-hexane	glass ampoule	**1750.2**	10 ml	~~91,90~~	**73,50**
Florisil® quality control standard	1 000 mg/l mineral oil and diesel in *n*-hexane	glass ampoule	**9334.1**	5 ml	~~68,90~~	**54,90**
Standard mixture of mineral oils	500 mg/l mineral oil and diesel in acetone	glass ampoule	**1774.2**	5 ml	~~109,00~~	**87,20**
	50 000 mg/l mineral oil and diesel in *n*-hexane	glass ampoule	**1LCE.1**	1 ml	~~189,00~~	**150,90**
			1LCE.2	5 ml	~~709,00~~	**567,20**
	50/50 mineral oil and diesel, solvent-free	glass ampoule	**1LCH.1**	1 ml	~~117,90~~	**94,30**
			1LCH.2	5 ml	~~209,00~~	**166,90**
	5 000 mg/l mineral oil and diesel in *n*-hexane	glass ampoule	**1773.2**	5 ml	~~95,90~~	**76,70**
Stearyl stearate test solution	2 000 mg/l in *n*-hexane	glass ampoule	**1760.2**	10 ml	~~129,00~~	**103,20**

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

Additional Chemicals for Determination of the Hydrocarbon Index

-20 %

Product name	Brand/Purity	Pack.	Art. No.	Pack Qty.	€	€
Acetone	ROTISOLV® Pestilyse® plus ≥99,9 %	glass	**7535.1**	2.5 l	~~64,90~~	**51,90**
Florisil®	for hydrocarbon index analysis, 60–100 mesh	plastic	**CN39.1**	100 g	~~52,90~~	**42,30**
			CN39.3	500 g	~~189,00~~	**150,90**
			CN39.2	1 kg	~~349,00~~	**278,90**
			CN39.4	2.5 kg	~~669,00~~	**535,20**
n-Hexane	ROTISOLV® Pestilyse® ≥97,5 %	glass	**T165.2**	1 l	~~47,50~~	**38,00**
			T165.1	2.5 l	~~107,90~~	**86,30**
			T165.3	4 l	~~126,50~~	**101,20**
	ROTISOLV® Pestilyse® plus ≥96 %	glass	**7567.1**	2.5 l	~~112,90~~	**90,30**
Magnesium sulphate heptahydrate	≥99 %, p.a., ACS	plastic	**P027.1**	500 g	~~26,90~~	**21,50**
			P027.2	1 kg	~~42,90~~	**34,30**
			P027.3	2.5 kg	~~81,90~~	**65,50**
Petroleum ether 40–60 °C	ROTISOLV® Pestilyse® plus	glass	**7588.1**	2.5 l	~~79,90~~	**63,90**
	ROTISOLV® Pestilyse®	glass	**T170.2**	1 l	~~37,50~~	**30,00**
			T170.1	2.5 l	~~74,90~~	**59,90**
			T170.3	4 l	~~105,90~~	**84,70**
Sodium sulphate	≥99 %, p.a., ACS, anhydrous, grained	plastic	**0966.1**	500 g	~~21,90~~	**17,50**
			0966.2	1 kg	~~32,90~~	**26,30**
			0966.3	5 kg	~~134,50~~	**107,60**

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Accessories for the Determination of the Hydrocarbon Index

-15 %

SPE glass column CHROMABOND® Na_2SO_4/Florisil®

Macherey-Nagel. Material: Glass (borosilicate type I) with glass fiber (GF) filter elements.

For environmental analysis

Extraction of hydrocarbons from water according to DIN H53 / ISO DIS 9377-4

Special combination phase of sodium sulphate and Florisil®

Column volume (ml)	Filling quantity (mg)	Pack.	Art. No.	Pack Qty.	€	€
6	2000/2000	1 × 30 units	**N744.1**	30 unit(s)	~~204,00~~	**173,40**
6	2000/2000	5 × 50 units	**N744.2**	250 unit(s)	~~1.365,00~~	**1.160,25**

Hydrocarbons in water acc. to ISO DIS 9377-4 / DIN H-53

Internal standard solution:
Solve 20 mg *n*-tetracontane ($C_{40}H_{82}$) in cyclohexane, add 20 ml *n*-nonane (C_9H_{20}) and fill up to 1 l with cyclohexane (corresponds to extraction agent stock solution, Art. No. 1750.2). To prepare the extraction standard solution dilute the stock solution with cyclohexane 1:10 immediately before use.

Sample pretreatment:
Adjust 900 ml water (10 °C) to pH 2 with HCl and add 80 g $MgSO_4$. Add 50 ml of the extraction solution, close the bottle, and stir the suspension intensively for 30 min. Add water and separate the organic from the aqueous phase.

Column conditioning:
5 ml cyclohexane

Sample application:
Slowly force or aspirate the organic solution through the column (SPE glass column CHROMABOND® Na_2SO_4/Florisil®, Art. No. N744.1).

Elution:
Wash with 10 mL cyclohexane.

Evaporation:
Evaporate the combined organic solutions carefully to 1 ml or less. If necessary, fill up to 1 ml exactly. (Evaporation to 1 ml can be unnecessary, if the hydrocarbon content is high.)

Further analysis:
Gas chromatography (GC Capillary Columns ROTI®Cap-5 HT, ROTI®Cap-5, ROTI®Cap-1)

GC Capillary Columns ROTI®Cap-5 HT

Silarylene Phase

- **Non-polar**
- **Application areas:** simulated distillation, hydrocarbon, fuel, oil analysis, high boiling analytes, ideal for MS detectors

Similar phases:
- DB-5HT, VF-5HT, HT-5, XTI-5HT, ZB-5HT
- Equivalent to USP phases G27/G36

Product name	Column length	Ø Internal	Film thickness	Art. No.	Pack Qty.	€	€
GC capillary column ROTI®Cap-5 HT	15 m	0.25 mm	0.10 µm	**3883.1**	1 unit(s)	~~339,00~~	**287,90**
		0.32 mm		**3884.1**	1 unit(s)	~~349,00~~	**296,65**
		0.25 mm	0.25 µm	**3885.1**	1 unit(s)	~~339,00~~	**287,90**
		0.32 mm		**3888.1**	1 unit(s)	~~349,00~~	**296,65**
	30 m	0.25 mm	0.10 µm	**3889.1**	1 unit(s)	~~539,00~~	**457,90**
		0.32 mm		**3890.1**	1 unit(s)	~~569,00~~	**483,65**
		0.25 mm	0.25 µm	**3891.1**	1 unit(s)	~~539,00~~	**457,90**
		0.32 mm		**3892.1**	1 unit(s)	~~569,00~~	**483,65**

GC Capillary Columns ROTI®Cap-5

5 % Phenyl – 95 % Methylpolysiloxane

- **Non-polar**
- **Application areas:** standard phase with large range of applications

Similar phases:
- SE-54, SE-52, HP-5, SPB®-5, CP-SIL 8, Rtx-5, 007-5, BP5, MDN-5, AT™-5, ZB-5
- Équivalent aux phases USP G27 / G36

Product name	Column length	Ø Internal	Film thickness	Art. No.	Pack Qty.	€	€
GC capillary column ROTI®Cap-5	10 m	0.25 mm	0.25 µm	**6253.1**	1 unit(s)	~~219,00~~	**185,90**
	25 m	0.20 mm	0.50 µm	**6283.1**	1 unit(s)	~~469,00~~	**398,65**
		0.32 mm	1.00 µm	**6298.1**	1 unit(s)	~~499,00~~	**423,90**
	30 m		0.10 µm	**1387.1**	1 unit(s)	~~499,00~~	**423,90**
		0.25 mm	0.25 µm	**CN11.1**	1 unit(s)	~~469,00~~	**398,65**
	50 m	0.32 mm	1.00 µm	**6324.1**	1 unit(s)	~~829,00~~	**704,65**

GC Capillary Columns ROTI®Cap-1

100 % Dimethylpolysiloxane

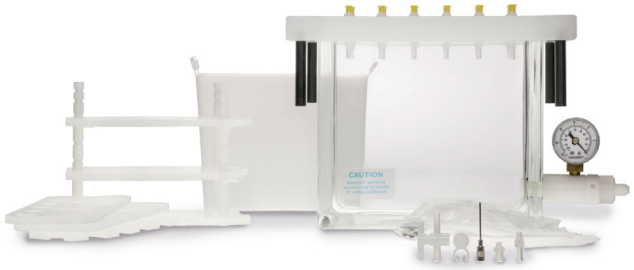
- **Non-polar**
- **Application areas:** Excellent column for routine applications.

Similar phases:
- OV-1, DB-1, SE-30, HP-1, SPB®-1, CP-SIL 5 CB, Rtx®-1, 007-1, BP1, MDN-1, AT™-1, ZB-1, OV-101
- Equivalent to USP phases G1/G2/G38

Product name	Column length	Ø Internal	Film thickness	Art. No.	Pack Qty.	€	€
GC capillary column ROTI®Cap-1	10 m	0.25 mm	0.25 µm	**6081.1**	1 unit(s)	~~219,00~~	**185,90**
	15 m	0.53 mm	1.00 µm	**2849.1**	1 unit(s)	~~319,00~~	**270,90**
		0.32 mm	0.25 µm	**6074.1**	1 unit(s)	~~299,00~~	**253,90**
	25 m	0.25 mm		**6135.1**	1 unit(s)	~~469,00~~	**398,65**
		0.32 mm		**6148.1**	1 unit(s)	~~499,00~~	**423,90**
	30 m			**1220.1**	1 unit(s)	~~499,00~~	**423,90**
	50 m	0.53 mm	5.00 µm	**6222.1**	1 unit(s)	~~889,00~~	**755,65**

SPE Accessories

-15 %



SPE Vacuum Manifold CHROMABOND®

Macherey-Nagel.

For **filtration** and solid **extraction**. Ideal for rapid **sample preparation**. Each tube position is equipped with a valve and can therefore be evacuated either individually or with the others. Each individual valve contains a Luer fitting, enabling filtration with a syringe filter or mounting of a disposable syringe. Inner body makes exact positioning of test tubes under each available opening.

Delivery incl. Glass cabinet with lid, lid gasket, plastic needles, vacuum gauge, control valve, Luer fittings, Luer valves (stopcocks), caps, variable rack, PP tank.

Version	Art. No.	Pack Qty.	€	€
for 12 positions, complete	**1ECC.1**	1 set	~~860,00~~	**731,00**
for 24 positions, complete	**1ECE.1**	1 set	~~1.265,00~~	**1.075,25**

SPE Reservoir Columns CHROMABOND®

Macherey-Nagel. Material: PP.

Delivery incl. 1 adaptor.

Version	Art. No.	Pack Qty.	€	€
30 ml with adaptor for 1,3,6 ml CHROMABOND® SPE PP columns	**1LX3.1**	10 unit(s)	~~97,30~~	**82,70**
70 ml with adaptor for 1,3,6 ml CHROMABOND® SPE PP columns	**1LX4.1**	10 unit(s)	~~104,00~~	**88,40**
70 ml with adaptor for 15,45,70 ml CHROMABOND® SPE PP columns	**1LX5.1**	10 unit(s)	~~144,00~~	**122,40**

Collection Rack CHROMABOND®

Macherey-Nagel.

To accommodate a variety of collection vessels for collecting eluates.

Version	Art. No.	Pack Qty.	€	€
12 positions	**1H09.1**	1 unit(s)	~~246,00~~	**208,90**
24 positions	**1H0A.1**	1 unit(s)	~~246,00~~	**208,90**
XTR	**1HN7.1**	1 set	~~805,00~~	**684,25**

Empty SPE columns CHROMABOND®

Macherey-Nagel.

Can be used with SPE vacuum manifolds (1ECC.1 or 1ECE.1) and other vacuum systems with Luer system. Excellent chemical resistance. Column outlet: Luer (male).

Delivery incl. filter elements.

Version	Ø x L (mm)	Art. No.	Pack Qty.	€	€
1 ml, polypropylene	7.5 x 65.8	**1ECH.1**	100 unit(s)	~~175,00~~	**148,75**
3 ml, polypropylene	10.7 x 74.7	**1ECK.1**	50 unit(s)	~~112,00~~	**95,20**
6 ml, polypropylene	14.5 x 77.9	**1ECL.1**	30 unit(s)	~~78,10~~	**66,35**
15 ml, polypropylene	17.5 x 90.4	**1K1T.1**	20 unit(s)	~~90,80~~	**76,90**
30 ml, polypropylene	22.6 x 98.6	**1K1X.1**	20 unit(s)	~~95,10~~	**80,80**
3 ml, glass	10.8 x 82.9	**1ECN.1**	50 unit(s)	~~223,00~~	**189,55**
6 ml, glass	14.4 x 80.0	**1ECP.1**	30 unit(s)	~~175,00~~	**148,75**

Adapters for SPE Columns CHROMABOND®

Macherey-Nagel.

For coupling of several CHROMABOND® columns of the same or different sizes or for coupling of dispoable syringes with CHROMABOND® columns.

Version	Art. No.	Pack Qty.	€	€
For 1, 3, 6 ml PP columns	**2996.2**	10 unit(s)	~~84,50~~	**71,80**
For 3 and 6 ml glass columns	**1L16.1**	10 unit(s)	~~175,00~~	**148,75**

Zamówienia:

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CARL ROTH®