Chemicals
TOP Offers

SOLVAGREEN® – Our Brand for Alternative Solvents

-20 %

Green Solvents

The sustainable solvents listed below – Green Solvents – serve as substitutes for environmentally hazardous and harmful reagents and help minimize risk. Sustainability is also achieved through the use of renewable resources or environmentally compatible manufacturing and recycling processes.

Succinic acid
≥99 %, for synthesis, made from renewable raw material

For the production of bio-based polyurethanes, coatings, surface treatment etc.

WGK 1

Danger H318

Art. No.	Pack Qty.	Pack.	DKK	DKK
1N1L.1	250 g	plastic	~~176,65~~	**141,00**
1N1L.2	1 kg	plastic	~~399,40~~	**319,15**
1N1L.3	2.5 kg	plastic	~~879,00~~	**702,75**
1N1L.4	5 kg	plastic	~~1572,40~~	**1257,75**

Dimethyl sulphoxide (DMSO)
SOLVAGREEN® ≥99,0 %, for synthesis, recycled material

WGK 1

Art. No.	Pack Qty.	Pack.	DKK	DKK
1P1T.1	1 l	glass	~~402,40~~	**321,40**
1P1T.2	2.5 l	glass	~~798,40~~	**638,25**
1P1T.3	5 l	plastic	~~1524,00~~	**1218,75**

Glycerol
SOLVAGREEN® ≥98 %, Ph. Eur., palm-free

WGK 1

Art. No.	Pack Qty.	Pack.	DKK	DKK
1YP1.1	500 ml	plastic	~~281,65~~	**224,65**
1YP1.2	1 l	plastic	~~483,00~~	**385,90**
1YP1.3	2.5 l	plastic	~~798,40~~	**638,25**
1YP1.4	5 l	plastic	~~1282,15~~	**1025,25**
1YP1.5	10 l	plastic	~~2410,90~~	**1928,25**
1YP1.6	25 l	plastic	~~4587,75~~	**3669,75**

Glycerol
SOLVAGREEN® ~86 %, for synthesis, palm-free

WGK 1

Art. No.	Pack Qty.	Pack.	DKK	DKK
1T4E.1	1 l	plastic	~~314,65~~	**251,25**
1T4E.2	2.5 l	plastic	~~556,50~~	**444,75**
1T4E.3	5 l	plastic	~~1040,25~~	**831,75**
1T4E.4	10 l	plastic	~~1846,50~~	**1476,75**
1T4E.5	25 l	plastic	~~3700,90~~	**2960,25**

► You can find more Green Chemicals in our webshop and in the brochure **Green Chemistry - alternative solvents and products.**

Valid from 1 August to 30 September 2023

Frisenette ApS · Energivej 134 · 8420 Knebel, Denmark
Phone: +45 86 34 22 44 · E-Mail: roth@frisenette.dk · Internet: www.frisenette.dk

DK-EN

Solvents for Synthesis

-15 %

Acetic acid ethyl ester
≥99,5 %, for synthesis

UN no. 1173 · ADR 3 II · WGK 1

Danger H225-H319-H336-EUH066

Art. No.	Pack Qty.	Pack.	DKK	DKK
7338.1	1 l	glass	~~241,15~~	204,75
7338.3	2.5 l	glass	~~415,50~~	352,50
7338.5	5 l	plastic	~~684,75~~	581,65
7338.2	10 l	tinplate	~~1120,90~~	952,50
7338.4	25 l	tinplate	~~2249,65~~	1911,75

Acetic acid methyl ester
≥99 %, for synthesis

UN no. 1231 · ADR 3 II · WGK 1

Danger H225-H319-H336-EUH066

Art. No.	Pack Qty.	Pack.	DKK	DKK
3730.3	500 ml	glass	~~168,75~~	142,90
3730.1	1 l	glass	~~313,90~~	266,25
3730.2	2.5 l	glass	~~588,00~~	499,50
3730.4	5 l	aluminium	~~879,00~~	747,00

Acetone
≥99,5 %, for synthesis

UN no. 1090 · ADR 3 II · WGK 1

Danger H225-H319-H336-EUH066

Art. No.	Pack Qty.	Pack.	DKK	DKK
5025.1	1 l	glass	~~176,65~~	150,00
5025.2	2.5 l	glass	~~391,15~~	331,90
5025.5	2.5 l	plastic	~~375,00~~	318,40
5025.6	5 l	plastic	~~531,40~~	451,50
5025.3	10 l	tinplate	~~927,40~~	787,90
5025.4	25 l	tinplate	~~1915,15~~	1627,15

Cyclohexane
≥99,5 %, for synthesis

UN no. 1145 · ADR 3 II · WGK 2

Danger
H225-H304-H315-H336-H410

Art. No.	Pack Qty.	Pack.	DKK	DKK
6570.1	1 l	glass	~~225,00~~	190,90
6570.3	2.5 l	glass	~~337,90~~	286,90
6570.5	5 l	aluminium	~~571,90~~	485,65
6570.2	10 l	tinplate	~~959,65~~	815,25
6570.4	25 l	tinplate	~~1927,15~~	1637,65

Dichloromethane
≥99,5 %, for synthesis

UN no. 1593 · ADR 6.1 III · WGK 2

Warning H315-H319-H336-H351

Art. No.	Pack Qty.	Pack.	DKK	DKK
8424.4	100 ml	glass	~~104,25~~	88,15
8424.1	1 l	glass	~~233,25~~	197,65
8424.2	2.5 l	glass	~~466,90~~	396,40
8424.3	10 l	tinplate	~~1366,90~~	1161,40
8424.5	25 l	tinplate	~~2620,50~~	2227,15

Diethyl ether
≥99,5 %, for synthesis, stabilised

UN no. 1155 · ADR 3 I · WGK 1

Danger
H224-H302-H336-EUH019 EUH066

Art. No.	Pack Qty.	Pack.	DKK	DKK
5920.2	1 l	glass	~~346,15~~	293,65
5920.3	5 l	aluminium	~~1201,50~~	1021,15
5920.4	25 l	tinplate	~~3426,75~~	2912,25

Ethanol
≥99,8 %, denatured

UN no. 1170 · ADR 3 II · WGK 1

Danger H225-H319

Art. No.	Pack Qty.	Pack.	DKK	DKK
K928.5	1 l	plastic	~~144,40~~	122,25
K928.1	2.5 l	glass	~~297,75~~	252,75
K928.3	2.5 l	plastic	~~281,65~~	238,90
K928.4	5 l	plastic	~~504,00~~	427,90
K928.6	10 l	tinplate	~~883,15~~	750,00
K928.7	10 l	plastic	~~802,50~~	681,40
K928.2	25 l	tinplate	~~1765,90~~	1500,75
K928.8	25 l	plastic	~~1604,65~~	1363,50

Methanol
≥99 %, for synthesis

UN no. 1230 · ADR 3 (6.1) II · WGK 2

Danger
H225-H301+H311+H331-H370

Art. No.	Pack Qty.	Pack.	DKK	DKK
8388.1	1 l	glass	~~149,25~~	126,40
8388.2	2.5 l	glass	~~297,75~~	252,75
8388.5	2.5 l	plastic	~~201,00~~	170,25
8388.6	5 l	plastic	~~423,40~~	359,65
8388.3	10 l	tinplate	~~676,50~~	574,90
8388.4	25 l	tinplate	~~1120,90~~	952,50

2-Propanol
≥99,5 %, for synthesis

UN no. 1219 · ADR 3 II · WGK 1

Danger H225-H319-H336

Art. No.	Pack Qty.	Pack.	DKK	DKK
9866.1	1 l	glass	~~217,15~~	184,15
9866.2	2.5 l	glass	~~499,15~~	424,15
9866.5	2.5 l	plastic	~~483,00~~	410,25
9866.6	5 l	plastic	~~794,25~~	674,65
9866.3	10 l	tinplate	~~1282,15~~	1089,40
9866.7	10 l	plastic	~~1201,50~~	1021,15
9866.4	25 l	tinplate	~~2572,15~~	2185,90
9866.8	25 l	plastic	~~2459,25~~	2089,90

Tetrahydrofuran
≥99,5 %, for synthesis, stabilised

UN no. 2056 · ADR 3 II · WGK 1

Danger
H225-H302-H319-H335-H336-H351-EUH019

Art. No.	Pack Qty.	Pack.	DKK	DKK
4745.1	250 ml	glass	~~217,15~~	184,15
4745.2	1 l	glass	~~386,25~~	328,15
4745.3	2.5 l	glass	~~773,25~~	657,00
4745.4	10 l	tinplate	~~2338,15~~	1987,15
4745.5	25 l	tinplate	~~4104,00~~	3488,25

Toluene
≥99,5 %, for synthesis

UN no. 1294 · ADR 3 II · WGK 3

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

Art. No.	Pack Qty.	Pack.	DKK	DKK
9558.1	1 l	glass	~~257,25~~	218,25
9558.3	2.5 l	glass	~~447,75~~	379,90
9558.2	10 l	tinplate	~~1088,65~~	925,15
9558.4	25 l	tinplate	~~2169,00~~	1843,50

Trichloromethane/Chloroform
≥99 %, for synthesis

UN no. 1888 · ADR 6.1 III · WGK 3

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

Art. No.	Pack Qty.	Pack.	DKK	DKK
Y015.1	1 l	glass	~~257,25~~	218,25
Y015.2	2.5 l	glass	~~507,40~~	430,90
Y015.3	10 l	tinplate	~~1765,90~~	1500,75
Y015.4	25 l	tinplate	~~3539,65~~	3008,25

Water
distilled

Art. No.	Pack Qty.	Pack.	DKK	DKK
1CX3.1	1 l	plastic	~~55,90~~	46,90
1CX3.2	5 l	plastic	~~165,40~~	140,25
1CX3.3	10 l	plastic	~~246,00~~	208,50
1CX3.4	25 l	plastic	~~547,50~~	465,00

Xylene (isomers)
≥97 %, for synthesis

UN no. 1307 · ADR 3 III · WGK 2

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

Art. No.	Pack Qty.	Pack.	DKK	DKK
2662.1	1 l	glass	~~197,65~~	167,65
2662.2	2.5 l	glass	~~314,65~~	267,00
2662.5	5 l	aluminium	~~556,50~~	472,90
2662.3	10 l	tinplate	~~879,00~~	747,00
2662.4	25 l	tinplate	~~1814,25~~	1541,65

How to open a ROTITAINER®?

You can find our instruction video on the Internet at: https://www.carlroth.com/en/en/rotitainer

Technical Salts

-20 %

Potassium permanganate
≥98 %, technical

UN no. 1490 · ADR 5.1 II · WGK 3

Danger
H272-H302-H314-H361d-H373-H410

Art. No.	Pack Qty.	Pack.	DKK	DKK
1HH5.1	500 g	plastic	~~225,00~~	**179,65**
1HH5.2	1 kg	plastic	~~370,15~~	**295,90**
1HH5.3	5 kg	plastic	~~1282,15~~	**1025,25**
1HH5.4	10 kg	plastic	~~2330,25~~	**1863,75**
1HH5.5	25 kg	plastic	~~5313,40~~	**4250,25**

Potassium hexacyanoferrate(II) trihydrate
≥98,5 %, cryst.

WGK 2

H412-EUH032

Art. No.	Pack Qty.	Pack.	DKK	DKK
7974.1	250 g	plastic	~~197,65~~	**157,90**
7974.2	1 kg	plastic	~~563,65~~	**450,40**
7974.3	5 kg	plastic	~~2217,40~~	**1773,75**

Potassium hexacyanoferrate(III)
≥99 %, technical

WGK 2

EUH032

Art. No.	Pack Qty.	Pack.	DKK	DKK
7971.3	500 g	plastic	~~358,90~~	**286,90**
7971.1	1 kg	plastic	~~628,15~~	**502,15**
7971.2	5 kg	plastic	~~2572,15~~	**2057,25**

Other salts in technical quality:

-15 %

Ammonium carbonate
≥30,5 % NH_3, extra pure

WGK 1

Danger H302-H315-H318

Art. No.	Pack Qty.	Pack.	DKK	DKK
CN94.1	500 g	plastic	~~152,65~~	**129,40**
CN94.2	1 kg	plastic	~~238,15~~	**201,75**
CN94.4	2.5 kg	plastic	~~418,50~~	**355,50**
CN94.3	5 kg	plastic	~~717,75~~	**609,75**

Copper(II) sulphate pentahydrate
≥98 %, cryst.

UN no. 3077 · ADR 9 III · WGK 3

Danger H302-H318-H410

Art. No.	Pack Qty.	Pack.	DKK	DKK
8175.6	250 g	plastic	~~128,25~~	**108,75**
8175.1	1 kg	plastic	~~273,40~~	**232,15**
8175.3	2.5 kg	plastic	~~556,50~~	**472,90**
8175.2	5 kg	plastic	~~1008,00~~	**856,50**
8175.4	10 kg	plastic	~~1665,00~~	**1414,90**
8175.5	25 kg	plastic	~~3055,90~~	**2597,25**

Lead(II) nitrate
≥99 %, pure

UN no. 1469 · ADR 5.1 (6.1) II · WGK 3

Danger
H302+H332-H360Df-H372-H410

Art. No.	Pack Qty.	Pack.	DKK	DKK
1P5X.1	100 g	glass	~~128,25~~	**108,75**
1P5X.2	500 g	glass	~~475,15~~	**403,50**
1P5X.3	1 kg	glass	~~818,65~~	**695,25**

Lithium carbonate
≥99 %, extra pure

WGK 1

Warning H302-H319

Art. No.	Pack Qty.	Pack.	DKK	DKK
7324.1	100 g	plastic	~~321,75~~	**273,00**
7324.2	500 g	plastic	~~1282,15~~	**1089,40**
7324.3	1 kg	plastic	~~2491,50~~	**2117,65**
7324.4	2.5 kg	plastic	~~5200,50~~	**4420,15**
7324.5	5 kg	plastic	~~10078,15~~	**8566,15**

Lithium chloride
≥98,5 %, pure

WGK 1

Warning H302-H315-H319

Art. No.	Pack Qty.	Pack.	DKK	DKK
P007.1	250 g	plastic	~~789,40~~	**670,50**
P007.2	1 kg	plastic	~~2894,65~~	**2460,00**
P007.3	2.5 kg	plastic	~~6361,50~~	**5407,15**

di-Potassium hydrogen phosphate
≥98 %, anhydrous

WGK 1

Art. No.	Pack Qty.	Pack.	DKK	DKK
6875.2	500 g	plastic	~~217,15~~	**184,15**
6875.1	1 kg	plastic	~~370,15~~	**314,25**
6875.3	5 kg	plastic	~~1443,40~~	**1226,65**
6875.7	25 kg	plastic	~~6119,65~~	**5201,25**

Potassium iodide
≥99 %, extra pure

WGK 3

Danger H372

Art. No.	Pack Qty.	Pack.	DKK	DKK
0323.1	100 g	glass	~~289,50~~	**245,65**
0323.2	500 g	glass	~~1088,65~~	**925,15**
0323.3	1 kg	glass	~~2056,15~~	**1747,50**
0323.4	2.5 kg	glass	~~4104,00~~	**3488,25**

Sodium carbonate
≥99 %, anhydrous

WGK 1

Warning H319

Art. No.	Pack Qty.	Pack.	DKK	DKK
8563.1	1 kg	plastic	~~152,65~~	**129,40**
8563.2	10 kg	plastic	~~600,75~~	**510,40**
8563.5	25 kg	plastic	~~1120,90~~	**952,50**

Sodium chloride
≥99,8 %, with anti-caking agent

WGK 1

Art. No.	Pack Qty.	Pack.	DKK	DKK
9265.1	1 kg	plastic	~~96,00~~	**81,40**
9265.2	5 kg	plastic	~~281,65~~	**238,90**
9265.3	10 kg	plastic	~~507,40~~	**430,90**
9265.5	25 kg	plastic	~~1008,00~~	**856,50**
9265.4	50 kg	cardboard	~~1653,00~~	**1404,75**

Sodium chloride
≥99 %

WGK 1

Art. No.	Pack Qty.	Pack.	DKK	DKK
0601.1	1 kg	plastic	~~104,25~~	**88,15**
0601.2	5 kg	plastic	~~305,65~~	**259,50**
0601.3	10 kg	plastic	~~531,40~~	**451,50**
0601.4	25 kg	plastic	~~1028,25~~	**873,40**

Sodium iodide
≥99 %, pure

UN no. 3077 · ADR 9 III · WGK 3

Danger H315-H319-H372-H400

Art. No.	Pack Qty.	Pack.	DKK	DKK
1LX8.1	250 g	plastic	~~531,40~~	**451,50**
1LX8.2	500 g	plastic	~~842,65~~	**715,90**
1LX8.3	1 kg	plastic	~~1471,50~~	**1250,25**
1LX8.4	2.5 kg	plastic	~~3104,25~~	**2638,15**

Zinc chloride
≥97 %, cryst.

UN no. 2331 · ADR 8 III · WGK 3

Danger H302-H314-H335-H410

Art. No.	Pack Qty.	Pack.	DKK	DKK
3533.1	1 kg	plastic	~~222,00~~	**188,25**
3533.3	2.5 kg	plastic	~~466,90~~	**396,40**
3533.2	10 kg	plastic	~~1653,00~~	**1404,75**

Zirconyl nitrate hydrate
≥99,5 %, pure

UN no. 3085 · ADR 5.1 (8) II · WGK 1

Danger H272-H314

Art. No.	Pack Qty.	Pack.	DKK	DKK
1P69.1	50 g	glass	~~241,15~~	**204,75**
1P69.2	100 g	glass	~~391,15~~	**331,90**
1P69.3	500 g	glass	~~1463,65~~	**1243,50**

Quechers

-15 %

QuEChERS Products

For pesticide residue analysis in food

Within a few years after its development the **QuEChERS** method (**Qu**ick, **E**asy, **Ch**eap, **E**fficient, **R**ugged, **S**afe) has gained a leading position for determination of pesticide residues in food samples by GC-MS or LC-MS, allowing rapid and cheap clean-up of strongly matrix-contaminated samples. For optimizing the extraction of pH-dependent compounds, for minimizing decomposition of sensitive substances, and for broadening the matrix spectrum,different modifications of the QuEChERS method have been elaborated.
In addition to the required adsorbent Silica gel 60 diamino a number of individually weighed and premixed buffer and extraction mixtures is offered, specially composed for different sample matrices.
For extraction, the European standard EN 15662 recommends a citrate extraction mix (Mix I), while AOAC standard 2007.1 uses an acetate extraction mix (Mix II). For clean-up, the Diamino phase (PSA) removes, e.g., sugars and organic acids. Magnesium sulfate removes water, C_{18} ec removes non-polar interferences such as fats and the carbon phase removes pigments, sterols, and non-polar interferences.
For selection of the proper clean-up mix see table below.

For selection of the proper QuEChERS mix see table below.

Step 1 - Extraction and salting-out				
Method	**Mix**	**Content of Mix**	**Sample weight**	**Solvent**
EN 15662:2008, citrate-buffered	**Mix I**	4 g $MgSO_4$, 1 g NaCl, 0,5 g Na_2H citrat · 1,5 H_2O, 1 g Na_3 citrat · 2 H_2O	10 g	10 ml acetonitrile
AOAC 2007.01, acetate-buffered	**Mix II**	6 g $MgSO_4$, 1,5 g NaOAc	15 g	15 ml 1 % acetic acid in acetonitrile
Original, unbuffered	**Mix XII**	4 g $MgSO_4$, 1 g NaCl	10 g	10 ml acetonitrile
Step 2 - Clean up				
Sample property	**Low fat content** (e.g. pineapple, apples, pear, broccoli, strawberries, asparagus)	**Moderate content of chlorophyll and carotinoids** (e.g. carrots, lettuce)	**High content of chlorophyll and carotinoids** (e.g. blackberry, bell pepper, raspberry, spinach)	**High fat content** (e.g. avocado, baby food, meat, dairy products, muesli, nuts, oil)
Content of Mix	$MgSO_4$, Diamino (PSA)	$MgSO_4$, Diamino (PSA), Carbon	$MgSO_4$, Diamino (PSA), Carbon	$MgSO_4$, Diamino (PSA), C_{18} ec
EN 15662:2008	**Mix III** Diamino Clean up	**Mix VI** Diamino/C_{18} ec Clean up	**Mix V** Diamino/Carbon Clean up (higher carbon content)	**Mix VI** Diamino/C_{18} ec Clean up
AOAC 2007.01	**Mix XX** Diamino Clean up	**Mix XVII** Diamino/C_{18} ec Clean up	–	**Mix XIX** Diamino/C_{18} ec Clean up

QuEChERS Extraction mixes

Product name	Purity	Method	Composition	Packaging	Art. No.	Pack Qty.	DKK	DKK
QuEChERS Extraction Mix I	Citrat mix	EN 15662	4 g $MgSO_4$ 1 g NaCl 0.5 g $C_6H_6Na_2O_7 \cdot 1,5\ H_2O$ 1 g $C_6H_5Na_3O_7 \cdot 2\ H_2O$	50 x 15 ml tubes	**4867.1**	50 unit(s)	~~1257,75~~	**1069,15**
QuEChERS Extraction Mix II	Acetate mix	AOAC 2007.01	6 g $MgSO_4$ 1.5 g $C_2H_3NaO_2$	50 x 15 ml tubes	**4868.1**	50 unit(s)	~~1257,75~~	**1069,15**
QuEChERS Extraction Mix XII **NEW**	unbuffered	Original	1 g $MgSO_4$ 0.25 g NaCl	50 x 15 ml tubes	**219E.1**	50 unit(s)	~~1170,00~~	**1069,15**
			4 g $MgSO_4$ 1 g NaCl		**219E.2**	50 unit(s)	~~1170,00~~	**1069,15**
				50 x 50 ml tubes	**219E.3**	50 unit(s)	~~1170,00~~	**1069,15**

QuEChERS Clean-up mixes

Product name	Purity	Method	Composition	Packaging	Art. No.	Pack Qty.	DKK	DKK
QuEChERS Clean-up Mix III	Diamino mix	EN 15662	0.9 g $MgSO_4$ 0.15 g Diamino (PSA)	50 x 15 ml tubes	**4870.1**	50 unit(s)	~~846,75~~	**719,25**
QuEChERS Clean-up Mix IV	Diamino/Carbon mix	EN 15662	0.9 g $MgSO_4$ 0.15 g Diamino (PSA) 0.015 g Carbon (GCB)	50 x 15 ml tubes	**4871.1**	50 unit(s)	~~1056,40~~	**897,75**
QuEChERS Clean-up Mix V	Diamino/Carbon mix	EN 15662	0.9 g $MgSO_4$ 0.15 g Diamino (PSA) 0.045 g Carbon (GCB)	50 x 15 ml tubes	**4875.1**	50 unit(s)	~~1056,40~~	**897,75**
QuEChERS Clean-up Mix VI	Diamino/C_{18} ec mix	EN 15662	0.9 g $MgSO_4$ 0.15 g Diamino (PSA) 0.15 g C_{18} ec	50 x 15 ml tubes	**4877.1**	50 unit(s)	~~846,75~~	**719,25**
QuEChERS Clean up-Mix XVII	Diamino/Carbon mix	AOAC 2007.01	0.15 g $MgSO_4$ 50 mg Diamino (PSA) 50 mg Carbon (GCB)	50 x 2 ml tubes	**1LNX.1**	50 unit(s)	~~783,00~~	**664,90**
QuEChERS Clean-up Mix XIX	Diamino/C_{18} ec mix	AOAC 2007.01	0.15 g $MgSO_4$ 50 mg Diamino (PSA) 50 mg C_{18} ec	50 x 15 ml tubes	**1LNP.1**	50 unit(s)	~~846,75~~	**719,25**
			1200 mg $MgSO_4$ 400 mg Diamino (PSA) 400 mg C_{18} ec		**1LNP.2**	50 unit(s)	~~846,75~~	**719,25**
QuEChERS Clean-up Mix XX	Diamino mix	AOAC 2007.01	1.20 g $MgSO_4$ 0.40 g Diamino (PSA)	50 x 15 ml tubes	**1LNT.1**	50 unit(s)	~~846,75~~	**719,25**
QuEChERS Clean-up Mix XLVII **NEW**	Diamino/Carbon/C_{18} ec mix	AOAC 2007.01	1.2 g $MgSO_4$ 0.4 g Diamino (PSA) 0.4 g Carbon (GCB) 0.4 g C_{18} ec	50 x 15 ml tubes	**219N.1**	50 unit(s)	~~1672,50~~	**1528,15**
QuEChERS Clean-up Mix XLIX **NEW**	Diamino/Carbon/C_{18} ec mix	AOAC 2007.01	1.2 g $MgSO_4$ 0.4 g Diamino (PSA) 0.045 g Carbon (GCB) 0.4 g C_{18} ec	50 x 15 ml tubes	**219P.1**	50 unit(s)	~~1140,00~~	**1041,40**
QuEChERS Clean-up Mix L **NEW**	special clean-up-mix for PFAS analysis	FDA C-010.02	0.9 g $MgSO_4$ 0.3 g Diamino (PSA) 0.15 g Carbon (GCB)	50 x 15 ml tubes	**219L.1**	50 unit(s)	~~1575,00~~	**1438,90**
QuEChERS Clean-up Mix M1 **NEW**	special clean-up-mix for mycotoxin analysis	AOAC 2007.01	300 mg special sorbent blend	50 x 15 ml tubes	**219H.1**	50 unit(s)	~~1575,00~~	**1438,90**

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

Quechers

-15 %

Products for preparation of individual QuEChERS mixes

Product name	Purity	Art. No.	Pack Qty.	DKK	DKK
Magnesium sulphate	≥99 %, p.a., anhydrous	0682.1	100 g	~~184,90~~	156,75
		0682.2	500 g	~~507,40~~	430,90
		0682.3	1 kg	~~927,40~~	787,90
		0682.4	2.5 kg	~~1814,25~~	1541,65
	≥98 %, p.a., anhydrous, granulated	2278.1	100 g	~~176,65~~	150,00
		2278.2	500 g	~~418,50~~	355,50
		2278.3	1 kg	~~741,00~~	629,65
Silica gel 60 C_{18} ec	0,02–0,05 mm	6070.1	10 g	~~665,25~~	565,15
		6070.2	25 g	~~1282,15~~	1089,40
Silica gel 60 diamino	0,045 mm	4878.1	10 g	~~794,25~~	674,65
		4878.2	25 g	~~1685,25~~	1432,15
Sodium acetate	≥99 %, p.a., ACS, anhydrous	6773.1	250 g	~~305,65~~	259,50
		6773.2	1 kg	~~805,50~~	684,40
		6773.3	2.5 kg	~~1765,90~~	1500,75
		6773.5	25 kg	~~12496,90~~	10622,25
Sodium chloride	≥99,5 %, p.a., ACS, ISO	3957.6	10 g	~~88,15~~	74,25
		3957.3	500 g	~~136,50~~	115,50
		3957.1	1 kg	~~165,40~~	140,25
		3957.2	5 kg	~~604,15~~	513,00
		3957.4	10 kg	~~907,15~~	770,65
		3957.5	25 kg	~~1814,25~~	1541,65
tri-Sodium citrate dihydrate	≥99 %, p.a., ACS	3580.4	250 g	~~201,75~~	171,00
		3580.3	500 g	~~321,75~~	273,00
		3580.1	1 kg	~~531,40~~	451,50
		3580.2	5 kg	~~2169,00~~	1843,50
		3580.5	25 kg	~~5845,50~~	4968,40
di-Sodium hydrogen citrate 1,5-hydrate	≥99 %, cryst.	2611.1	250 g	~~201,00~~	170,25
		2611.2	500 g	~~302,65~~	256,50
		2611.3	1 kg	~~507,40~~	430,90

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

Standard clean-up in food samples:

10 g sample are homogenised with 10 ml acetonitrile. After adding the internal standard the sample is shaken with 4 g magnesium sulphate and 1 g sodium chloride and afterwards centrifuged. 1 ml of the supernatant is spiked with 25 mg CHROMABOND® Diamino and 150 mg magnesium sulphate and shaken again. After centrifugation, the supernatant is analysed by GC/MS or LC/MS.

Adsorbents and their usage

$MgSO_4$	Removes excess of water
NaCl	For phase separation
Silica Gel 60 Diamino (PSA) (Primary Secondary Amine)	Removes organic and fatty acids, sugars and anthocyanin pigments
Silica Gel 60 C_{18} ec (reversed phase modified silica)	Traps nonpolar compounds, e.g., lipids
Carbon (GCB) (Activated Charcoal / Graphitized Carbon Black)	Removes pigments and sterols (please note: planar pesticides are also removed)

For further information see www.quechers.com

Flame Coloring Sets

-15 %

Set for the identification of minerals in the Bunsen burner flame through the characteristic flame colouring of the salts in the “flame test”.

Our flame test kits also contain 10 magnesia rods and a wooden clamp for better handling. This provides the materials needed to demonstrate the flame colours of six different metals. During combustion, the metal or semi-metal ion contained in each chemical gives the flame a characteristic colour.

Application:

- Dip the magnesia rod into diluted hydrochloric acid (not included in the scope of delivery)
- Pick up some of the salt with the moistened magnesia rod
- Hold the end of the rod with the salt in the swooshing burner flame

Directions for use

If necessary, burn out the magnesia rods in the burner flame. The flame must be colourless.

The magnesia rods (10 pcs.) and a wooden clip are included in the kit.
Please order platinum wire separately.

Flame Test Kit 1

The kit contains

- 10 g barium chloride dihydrate Art. No. 4453.7
- 10 g calcium chloride dihydrate Art. No. 5239.5
- 10 g lithium chloride Art. No. 6698.5
- 10 g potassium chloride Art. No. 6781.4
- 10 g sodium chloride Art. No. 3957.6
- 10 g strontium chloride hexahydrate Art. No. 4473.4

UN no. 3316 · ADR 9 · WGK 1

Danger H301-H315-H318-H332

Art. No.	Pack Qty.	Pack.	DKK	DKK
1PE8.1	1 set	glass	~~402,40~~	**341,65**

Flame Test Kit 2

The kit contains

- 10 g barium sulphate Art. No. 1PE7.1
- 10 g caesium chloride Art. No. 8627.4
- 10 g copper(II) chloride dihydrate Art. No. CN82.4
- 10 g copper(II) nitrate trihydrate Art. No. P754.3
- 5 g indium(III) chloride Art. No. 0307.1
- 5 g rubidium chloride Art. No. 4471.2

UN no. 3316 · ADR 9 · WGK 3

Danger
H272-H290-H302+H312-H314-H361fd-H410

Art. No.	Pack Qty.	Pack.	DKK	DKK
1PE6.1	1 set	glass	~~644,25~~	**547,15**

More products for flame dyeing

Platinum wire
≥99,95 %, Ø 0,2 mm

Art. No.	Pack Qty.	Pack.	DKK	DKK
0737.1	25 cm	plastic	~~773,25~~	**657,00**
0737.2	50 cm	plastic	~~1443,40~~	**1226,65**
0737.3	1 m	plastic	~~2733,40~~	**2323,15**

Platinum wire
≥99,9 %, Ø 0,3 mm

Art. No.	Pack Qty.	Pack.	DKK	DKK
8415.1	10 cm	plastic	~~660,40~~	**561,00**
8415.2	50 cm	plastic	~~2551,90~~	**2168,65**

Platinum wire
≥99,95 %, Ø 0,5 mm

Art. No.	Pack Qty.	Pack.	DKK	DKK
0803.1	5 cm	plastic	~~721,90~~	**613,15**
0803.2	10 cm	plastic	~~1330,50~~	**1130,65**
0803.3	25 cm	plastic	~~2894,65~~	**2460,00**

Platinum wire NEW
≥99,95 %, Ø 1 mm

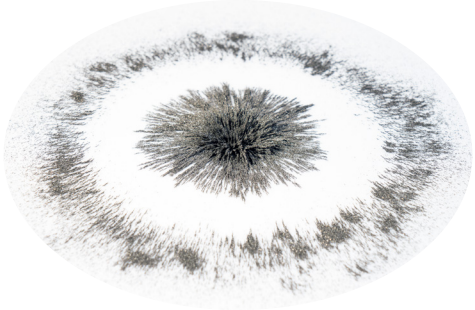
Art. No.	Pack Qty.	Pack.	DKK	DKK
212H.1	5 cm	plastic	~~1443,40~~	**1226,65**
212H.2	10 cm	plastic	~~2652,75~~	**2254,50**
212H.3	25 cm	plastic	~~5313,40~~	**4516,15**

Iron filings for magnetic field experiments

Iron filings
~100 mesh, grease free

For visible magnetic field lines.
Please do not contact the magnet directly.

Art. No.	Pack Qty.	Pack.	DKK	DKK
1P5A.1	100 g	glass	~~84,75~~	**71,65**
1P5A.2	500 g	glass	~~181,50~~	**153,75**
1P5A.3	1 kg	glass	~~297,75~~	**252,75**



Dyes and Indicators

-15 %

New for you now at Carl Roth

NEW

Product name	Purity	Pack.	Art. No.	Pack Qty.	DKK	DKK
Brown HT (C.I. 20285)	extra pure	glass	1XTK.1	10 g	~~160,50~~	136,15
			1XTK.2	25 g	~~321,75~~	273,00
			1XTK.3	100 g	~~724,90~~	615,75
Copper phthalocyanine	≥98 %	glass	1XP9.1	5 g	~~120,40~~	102,00
			1XP9.2	25 g	~~507,40~~	430,90
Orange yellow (C.I. 15985)	extra pure	glass	1XTN.1	10 g	~~160,50~~	136,15
			1XTN.2	25 g	~~321,75~~	273,00
			1XTN.3	100 g	~~724,90~~	615,75
Patent blue V calcium salt (C.I. 42051)	extra pure	glass	1XTP.1	10 g	~~160,50~~	136,15
			1XTP.2	25 g	~~321,75~~	273,00
			1XTP.3	100 g	~~724,90~~	615,75
Patent blue V sodium salt (C.I. 42051:2)	extra pure	glass	1XTT.1	10 g	~~160,50~~	136,15
			1XTT.2	25 g	~~321,75~~	273,00
			1XTT.3	100 g	~~724,90~~	615,75
Ponceau 4R (C.I. 16255)	extra pure	glass	1XTX.1	10 g	~~160,50~~	136,15
			1XTX.2	25 g	~~321,75~~	273,00
			1XTX.3	100 g	~~724,90~~	615,75
Pyranine (C. . 59040)	pure	glass	1T4H.1	10 g	~~176,65~~	150,00
			1T4H.2	25 g	~~362,25~~	307,50
			1T4H.3	100 g	~~1040,25~~	883,90
Quinoline yellow (C.I. 47005)	extra pure	glass	1XTL.1	10 g	~~160,50~~	136,15
			1XTL.2	25 g	~~321,75~~	273,00
			1XTL.3	100 g	~~724,90~~	615,75
Sudan Blue II (C. I. 61554)	pure	glass	1T4K.1	10 g	~~160,50~~	136,15
			1T4K.2	25 g	~~321,75~~	273,00
			1T4K.3	100 g	~~1040,25~~	883,90
Sudan Yellow G (C. I. 12700)	pure	glass	1T4L.1	10 g	~~160,50~~	136,15
			1T4L.2	25 g	~~321,75~~	273,00
			1T4L.3	100 g	~~1040,25~~	883,90

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

Phenolphthalein and alternative products

-20 %

Phenolphthalein (C.I. 764)

≥97 %, p.a., ACS

Indicator pH 8.0-10.0

Dissolve 0.1 g in 100 ml ethanol (96 %)

WGK 3

Danger H341-H350-H361f

Art. No.	Pack Qty.	Pack.	DKK	DKK
T126.2	50 g	plastic	~~160,50~~	127,90
T126.1	100 g	plastic	~~225,00~~	179,65
T126.3	500 g	plastic	~~612,00~~	489,40

Thymolphthalein

p.a., ACS

Indicator pH 8.8-10.5;
alternative for phenolphthalein

Dissolve 0.1 g in 100 ml of ethanol (50 %)

WGK 1

Art. No.	Pack Qty.	Pack.	DKK	DKK
HN97.1	5 g	glass	~~189,75~~	151,50
HN97.2	10 g	glass	~~321,75~~	256,90
HN97.3	50 g	glass	~~1169,25~~	935,25

o-Cresolphthaleine

pure

Indicator pH 8.2-9.8;
alternative for Phenolphthaleine

Dissolve 0.1 g in 100 ml ethanol

WGK 1

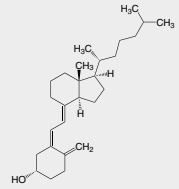
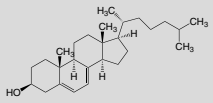
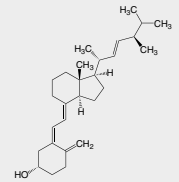
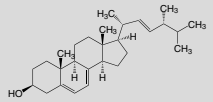
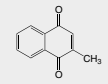
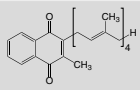
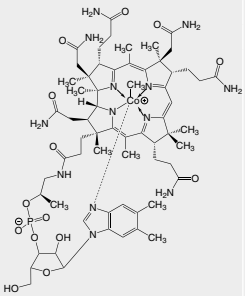
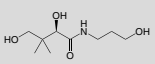
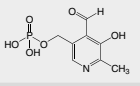
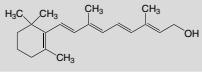
Art. No.	Pack Qty.	Pack.	DKK	DKK
1LAC.1	5 g	glass	~~84,75~~	67,50
1LAC.2	25 g	glass	~~346,15~~	276,40
1LAC.3	100 g	glass	~~858,75~~	686,65

Vitamins

NEW

-15 %

Vitamins are involved in many metabolic reactions. We can supply a range of high-purity substances suitable for biochemical applications in research and development.

Structural formula	Product name	Purity	Synonymous	Art. No.	Pack Qty.	DKK	DKK
	Cholecalciferol	≥98 %, for biochemistry	Vitamin D_3, Colecalciferol	1T99.1	500 mg	~~144,40~~	122,25
				1T99.2	1 g	~~241,15~~	204,75
				1T99.3	5 g	~~604,15~~	513,00
	7-Dehydrocholesterol	≥95 %, for biochemistry	Provitamin D_3, Cholesta-5,7-dien-3β-ol	1T97.1	1 g	~~160,50~~	136,15
				1T97.2	10 g	~~879,00~~	747,00
				1T97.3	25 g	~~2007,75~~	1706,25
	Ergocalciferol	≥97,5 %, for biochemistry	Calciferol, Vitamin D_2	1T9E.1	500 mg	~~402,40~~	341,65
				1T9E.2	1 g	~~724,90~~	615,75
	Ergosterol	≥94 %, for biochemistry	Provitamin D_2, Ergosta-5,7,22-trien-3β-ol	1T9N.1	10 g	~~563,65~~	478,90
				1T9N.2	25 g	~~1208,65~~	1027,15
				1T9N.3	50 g	~~2176,15~~	1849,50
	Menadione	≥98 %, for biochemistry	Vitamin K_3, 2-Methylnaphthalene-1,4-dione	1T96.1	10 g	~~201,00~~	170,25
				1T96.2	25 g	~~402,40~~	341,65
				1T96.3	100 g	~~1201,50~~	1021,15
	Menaquinone	≥98 %, for biochemistry	Vitamin K_2	1T9C.1	25 mg	~~241,15~~	204,75
				1T9C.2	50 mg	~~402,40~~	341,65
	Methylcobalamin	≥98,5 %, for biochemistry	Vitamin B_{12}	1T9A.1	25 mg	~~120,40~~	102,00
				1T9A.2	100 mg	~~442,90~~	376,15
				1T9A.3	250 mg	~~966,75~~	821,25
	Panthenol	≥98 %, for biochemistry	Pantothenol, Provitamin B_5	1T95.1	25 g	~~160,50~~	136,15
				1T95.2	50 g	~~281,65~~	238,90
				1T95.3	100 g	~~483,00~~	410,25
	Pyridoxal phosphate	≥98 %, for biochemistry	Pyridoxal 5-phosphate, PLP, Vitamin B_6 Phosphate	1T9H.1	1 g	~~160,50~~	136,15
				1T9H.2	10 g	~~644,25~~	547,15
				1T9H.3	25 g	~~1128,00~~	958,50
	Retinol	≥95 %, for biochemistry	Vitamin A_1	1T98.1	25 mg	~~168,75~~	142,90
				1T98.2	100 mg	~~346,15~~	293,65
				1T98.3	500 mg	~~1201,50~~	1021,15

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

Phone

+45 86 34 22 44 · roth@frisenette.dk