NEW at ROTH

June 2014

NEW Products and Programme Extensions in Chemicals

Content

NEW Products Chemicals 2-14

Acids

Hydrochloric acid 37 %

Hydrochloric acid 37 %

37 %, techn.
Hydrogen chloride
HCl
M 36,46 g/mol
D ~1,19
[7647-01-0]
EC No 231-595-7 · UN No. 1789
ADR 8 II · WGK 1

Danger H290-H314-H335

Type analysis:
Assay. ..... ≥36,5 %
Density (20 °C). 1,183-1,187
Lead (Pb). ..... ≤0,0001 %

7476.1	1 l	glass	13,85 €
Original pack 6 x 1 l			13,16/1 l
7476.2	2,5 l	glass	19,25 €
Original pack 4 x 2,5 l			18,29/2,5 l
7476.3	10 l	plastic	37,50 €
7476.4	25 l	plastic	63,30 €

Nitric acid 60 %

Nitric acid 60 %

60 %, pure
HNO_3
M 63,0 g/mol
D 1,36
[7697-37-2]
EC No 231-714-2 · UN No. 2031
ADR 8 II · WGK 1

Danger H290-H314

Type analysis:
Assay. ..... 59,0-61,0 %
Chloride (Cl). ..... ≤0,001 %
Iron (Fe). ..... ≤0,0005 %
Heavy metals (as Pb). ..... ≤0,001 %
Evaporation residue. ..... ≤0,01 %

6745.1	1 l	glass	19,25 €
Original pack 6 x 1 l			18,29/1 l
6745.2	5 l	plastic	43,95 €
Original pack 2 x 5 l			41,75/5 l
6745.3	10 l	plastic	59,00 €
6745.4	25 l	plastic	106,45 €

Nitric acid 40 %

Nitric acid 40 %

40 %, pure
HNO_3
M 63,0 g/mol
D 1,25
[7697-37-2]
EC No 231-714-2 · UN No. 2031
ADR 8 II · WGK 1

Danger H290-H314

Type analysis:
Assay. ..... 39,0-41,0 %
Chloride (Cl). ..... ≤0,001 %
Iron (Fe). ..... ≤0,0005 %
Heavy metals (as Pb). ..... ≤0,0001 %
Ash. ..... ≤0,001 %

6748.1	1 l	glass	17,10 €
Original pack 6 x 1 l			16,25/1 l
6748.2	5 l	plastic	42,90 €
Original pack 2 x 5 l			40,76/5 l
6748.3	10 l	plastic	53,65 €
6748.4	25 l	plastic	103,20 €

Analytical reagent

Silver nitrate solution

Silver nitrate solution

1 mol/l - 1 N volumetric standard solution
[7761-88-8]
EC No 231-853-9 · UN No. 1760
ADR 8 II · WGK 3

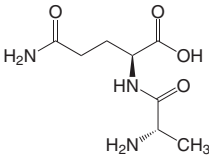
Danger H314-H400-H410

Type analysis:
Amount-of-substance conc. (20 °C). ..... 1 mol/l ±0,2 %

6841.1	250 ml	plastic	96,65 €
6841.2	500 ml	plastic	139,65 €
6841.3	1 l	plastic	268,65 €
Original pack 6 x 1 l			255,22/1 l

Biochemicals Cellpure®

L-Alanyl-L-glutamine



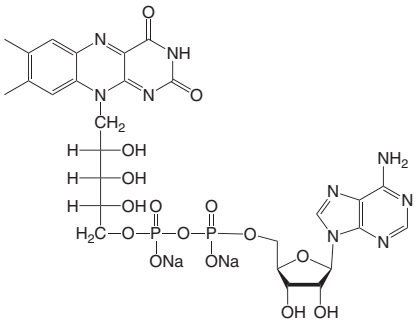
L-Alanyl-L-glutamine

≥99 %, CELLPURE®
$C_8H_{15}N_3O_4$
M 217,22 g/mol
mp 209 °C (dec.)
Solubility: 450 g/l (H_2O, 20 °C)
[39537-23-0]
WGK 1

Type analysis:
Appearance. ..... white cryst. powder
Assay (dry substance). ..... ≥99 %
Endotoxins. ..... ≤12,0 E.U./g
Specific rotation $[\alpha]_D^{20}$. ..... +9,0° to +11,0°
Ammonium (NH_4). ..... ≤0,02 %
Chloride (Cl). ..... ≤0,02 %
Sulphate (SO_4). ..... ≤0,02 %
Heavy metals (as Pb). ..... ≤0,001 %
Arsenic (As_2O_3). ..... ≤0,0001 %
Loss on drying. ..... ≤0,5 %
Ash content. ..... ≤0,1 %

6831.1	5 g	plastic	27,85 €
6831.2	10 g	plastic	38,60 €
6831.3	25 g	plastic	78,35 €
6831.4	100 g	plastic	268,75 €

Flavine-adenine-dinucleotide disodium salt



Flavine-adenine-dinucleotide disodium salt

≥95 %, CELLPURE®

FAD-Disodium salt, riboflavin-5'-adenosine diphosphate disodium salt

$C_{27}H_{31}O_{15}N_9Na_2P_2$

M 865,55 g/mol

Store at +4 °C

[84366-81-4]

EC No 282-733-8

WGK 3

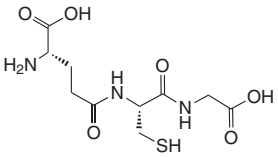
NEW

Type analysis:

Appearance. ..... orange yellow to pale yellowish brown powder
Assay (dry substance). ..... ≥95 %
Endotoxins. ..... ≤100 E.U./g
Heavy metals (as Pb) ..... ≤0,001 %
Arsenic (As_2O_3). ..... ≤0,0001 %
Moisture. ..... ≤10 %

6833.1	10 mg	glass	21,40 €
6833.2	50 mg	glass	32,15 €
6833.3	100 mg	glass	42,90 €

L-Glutathione reduced



L-Glutathione reduced

≥99 %, CELLPURE®

γ-L-Glutamyl-L-cysteinyl-glycine, GSH

$C_{10}H_{17}N_3O_6S$

M 307,33 g/mol

mp 177-183 °C

Store at +4 °C

[70-18-8]

EC No 200-725-4

WGK 1

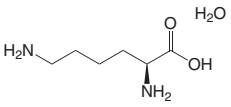
NEW

Type analysis:

Appearance. ..... white cryst. powder
Endotoxins. ..... ≤6,0 E.U./g
Assay (dry substance). ..... ≥99 %
Specific rotation $[\alpha]_D^{20}$. ..... -17,5° to -15,5°
Ammonium (NH_4). ..... ≤0,05 %
Sulphate (SO_4). ..... ≤0,05 %
Heavy metals (as Pb). ..... ≤0,001 %
Arsenic (As_2O_3). ..... ≤0,0001 %
Iron (Fe). ..... ≤0,001 %
Loss on drying. ..... ≤0,5 %
Ash content. ..... ≤0,1 %

6832.1	2,5 g	glass	22,45 €
6832.2	5 g	glass	32,15 €
6832.3	10 g	glass	49,35 €
6832.4	25 g	glass	100,95 €

L-Lysine monohydrate



L-Lysine monohydrate

≥98.5 %, CELLPURE®

For cell culture and biochemistry.

$C_6H_{14}N_2O_2 \cdot H_2O$

M 164,21 g/mol

Solubility: 300 g/l (H_2O, 20 °C)

Store at +4 °C

[39665-12-8]

EC No 200-294-2

WGK 1

NEW

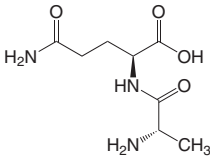
Type analysis:

Assay (dry substance). ..... ≥98,5 %
Endotoxins. ..... ≤6 I.U./g
Specific rotation $[\alpha]_D^{20}$. ..... +25,5° bis +27,0°
Water (KF). ..... 10,5-11,5 %
Ammonium (NH_4). ..... ≤0,02 %
Chloride (Cl). ..... ≤0,05 %
Sulphate (SO_4). ..... ≤0,02 %
Heavy metals (as Pb). ..... ≤0,001 %
Iron (Fe). ..... ≤0,001 %
Sulphated ash. ..... ≤0,1 %

6829.1	25 g	plastic	42,90 €
6829.2	100 g	plastic	78,35 €
6829.3	250 g	plastic	333,15 €

Biochemicals

L-Alanyl-L-glutamine



L-Alanyl-L-glutamine

NEW

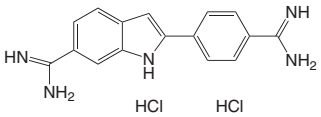
≥98 %, for biochemistry
$C_8H_{15}N_3O_4$
M 217,22 g/mol
mp 209 °C (dec.)
Solubility: 450 g/l (H_2O, 20 °C)
[39537-23-0]
WGK 1

Type analysis:

Assay (dry substance)	≥98 %
Specific rotation $[\alpha]^{20}_D$	+9,0° to +11,0°
Ammonium (NH_4)	≤0,05 %
Chloride (Cl)	≤0,05 %
Sulphate (SO_4)	≤0,05 %
Heavy metals (as Pb)	≤0,001 %
Loss on drying	≤1 %

6830.1	10 g	plastic	32,15 €
6830.2	50 g	plastic	117,20 €

DAPI



DAPI

NEW

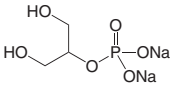
≥98 %, for biochemistry
4',6-Diamidino-2-phenylindole dihydrochloride
$C_{16}H_{17}Cl_2N_5$
M 350,3 g/mol
Store at -20 °C
Transport temp.: room temp.
[28718-90-3]
EC No 249-186-7
WGK 3

Type analysis:

Assay (HPLC)	≥98 %

6843.1	10 mg	glass	32,15 €
6843.2	25 mg	glass	57,95 €
6843.3	100 mg	glass	171,45 €

β-Glycerophosphate disodium salt pentahydrate



β-Glycerophosphate disodium salt pentahydrate

NEW

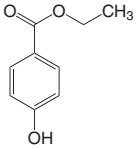
≥97 %, for biochemistry
Phosphatase inhibitor
[13408-09-8]
EC No 212-464-3
WGK 3

Type analysis:

Appearance	white cryst. powder
Assay	≥97,0 %
Chloride (Cl)	≤0,01 %
Sulphate (SO_4)	≤0,01 %
Heavy metals (as Pb)	≤0,002 %

6847.1	50 g	glass	40,75 €
6847.2	100 g	glass	75,15 €
6847.3	250 g	glass	172,00 €
6847.4	500 g	glass	321,45 €
Original pack 6 x 500 g			305,38/500 g

4-Hydroxybenzoic acid ethyl ester



4-Hydroxybenzoic acid ethyl ester

NEW

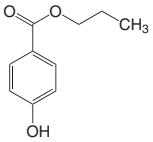
≥98 %, Ph. Eur., USP
Ethylparaben
$C_9H_{10}O_3$
M 166,18 g/mol
mp 115-118 °C
Solubility: ~1 g/l (H_2O, 20 °C)
[120-47-8]
EC No 204-399-4
WGK 1

Guarantee analysis:

Appearance	white powder
Assay (HPLC)	98,0-102,0 %
Identity	complies
Appearance of solution (10 % in ethanol 96 %)	clear
Colour of solution (10 % in ethanol 96 %)	complies
Acidity (0,1 M NaOH/0,2 g)	complies
Related substances (p-HBA)	complies
Related substances (unspecific impurities)	complies
Related substances (total)	complies
Volatile organic impurities	complies
Residual solvents (ethanol)	≤0,5 %
Loss on drying	≤0,5 %
Sulphated ash	≤0,1 %

6880.1	100 g	plastic	13,85 €
6880.2	250 g	plastic	24,60 €
6880.3	500 g	plastic	42,90 €
Original pack 6 x 500 g			40,76/500 g
6880.4	1 kg	plastic	64,40 €
Original pack 6 x 1 kg			61,18/1 kg

4-Hydroxybenzoic acid propyl ester



4-Hydroxybenzoic acid propyl ester

NEW

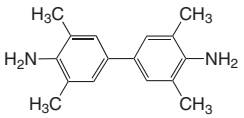
≥98 %, Ph. Eur., USP
Propylparaben, Propyl 4-hydroxybenzoate
$C_{10}H_{12}O_3$
M 180,21 g/mol
bp 285-317 °C
mp 96-99 °C · flp 180 °C
[94-13-3]
EC No 202-307-7
WGK 1

Guarantee analysis:

Appearance	white powder
Assay (HPLC)	98,0-102,0 %
Identity	complies
Appearance of solution (10 % in ethanol 96 %)	clear
Colour of solution (10 % in ethanol 96 %)	complies
Acidity (0,1 M NaOH/0,2 g)	complies
Related substances (p-HBA)	complies
Related substances (unspecific impurities)	complies
Related substances (total)	complies
Volatile organic impurities	complies
Residual solvents (ethanol)	≤0,2 %
Residual solvents (propanol)	≤0,5 %
Loss on drying	≤0,5 %
Sulphated ash	≤0,1 %

6882.1	100 g	plastic	16,00 €
6882.2	250 g	plastic	23,55 €
6882.3	500 g	plastic	40,75 €
Original pack 6 x 500 g			38,71/500 g
6882.4	1 kg	plastic	66,55 €
Original pack 6 x 1 kg			63,22/1 kg

3,3',5,5'-Tetramethylbenzidine



3,3',5,5'-Tetramethylbenzidine

≥98 %, for biochemistry

NEW

TMB
$C_{16}H_{20}N_2$
M 240,35 g/mol
mp 167-170 °C
Store at +4 °C
[54827-17-7]
EC No 259-364-6
WGK 3

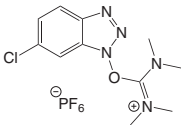
Type analysis:

Appearance. ..... white to yellow powder
Assay. ..... ≥98 %
Ash content. ..... ≤0,2 %
Loss on drying. ..... ≤0,5 %

6834.1	1 g	glass	21,40 €
6834.2	5 g	glass	53,65 €
6834.3	25 g	glass	213,95 €

Coupling reagents

O-(6-Chlorobenzotriazol-1-yl)-N,N,N',N'-tetramethyluronium tetrafluoroborate (TCTU)



O-(6-Chlorobenzotriazol-1-yl)-N,N,N',N'-tetramethyluronium tetrafluoroborate (TCTU)

NEW

≥98 %

Coupling reagent for peptide synthesis
TCTU
$C_{11}H_{15}BClF_4N_5O$
M 355,5 g/mol
[330641-16-2]
WGK 3

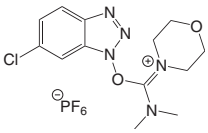
Danger H302

Type analysis:

Appearance. ..... white powder
Assay (HPLC). ..... ≥98 %
Water (KF). ..... ≤0,5 %
Loss on drying. ..... ≤0,5 %

6890.1	5 g	glass	23,50 €
6890.2	25 g	glass	75,15 €
6890.3	100 g	glass	193,40 €

4-((6-Chloro-1H-benzo{d}-[1,2,3]triazol-1-yloxy)-(dimethylamino)methylene)-morpholin-4-ium hexafluorophosphate (HDMC)



4-((6-Chloro-1H-benzo{d}-[1,2,3]triazol-1-yloxy)-(dimethylamino)methylene)-morpholin-4-ium hexafluorophosphate (HDMC)

NEW

≥99 %

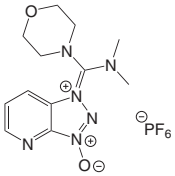
Coupling reagent for peptide synthesis
HDMC
$C_{13}H_{17}F_6N_5O_2PCl$
M 455,5 g/mol
mp 165-175 °C
Store at +4 °C
[1082951-62-9]
WGK 3

Type analysis:

Appearance. ..... white powder
Assay (HPLC). ..... ≥99 %
Loss on drying. ..... ≤0,5 %

6893.1	5 g	glass	35,40 €
6893.2	25 g	glass	139,65 €
6893.3	100 g	glass	483,65 €

1-[(Dimethylamino)-(morpholino)methylene]-1H-[1,2,3]triazolo-[4,5-b]pyridine-1-ium 3-oxide hexafluorophosphate (HDMA)



NEW

1-[(Dimethylamino)-(morpholino)methylene]-1H-[1,2,3]triazolo-[4,5-b]pyridine-1-ium 3-oxide hexafluorophosphate (HDMA)

≥98 %

Coupling reagent for peptide synthesis
HDMA
$C_{12}H_{17}F_6N_6O_2P$
M 422,3 g/mol
mp 185-195 °C
Store at +4 °C
[958029-37-3]
WGK 3

Warning

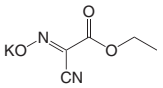
H302+H312+H332-H315-H319-H335

Type analysis:

Appearance. ..... white powder
Assay (HPLC). ..... ≥98 %
Loss on drying. ..... ≤0,5 %

6888.1	5 g	glass	36,45 €
6888.2	25 g	glass	118,15 €
6888.3	100 g	glass	429,90 €

Ethyl cyanoglyxylate-2-oxyme potassium salt (K-Oxyma)



Ethyl cyanoglyxylate-2-oxyme potassium salt (K-Oxyma)

NEW

≥99 %
Coupling reagent for peptide synthesis
K-Oxyma
$C_5H_5KN_2O_3$
M 180,2 g/mol
mp 145-155 °C
Store at +4 °C
[158014-03-0]
WGK 3

Type analysis:
Appearance. ..... bright yellow powder
Assay (HPLC). ..... ≥99 %
Water (KF). ..... ≤1,0 %

6891.1	25 g	glass	24,62 €
6891.2	50 g	glass	40,75 €
6891.3	250 g	glass	161,15 €

Element

Iodine

Iodine

NEW

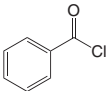
≥99.5 %, resublimated
I_2
M 253,81 g/mol
D 4,93 · bp 184,35 °C
mp 113,6 °C
Solubility: 0,34 g/l (H_2O, 20 °C)
[7553-56-2]
EC No 231-442-4 · UN No. 3495
ADR 8 (6.1) III · WGK 1
Warning H312+H332-H400

Type analysis:
Assay. ..... ≥99,5 %
Chloride (Cl). ..... ≤0,05 %
Non volatile matter. ..... ≤0,1 %

7335.1	250 g	glass	75,15 €
7335.2	500 g	glass	131,15 €
Original pack 6 x 500 g			124,59/500 g
7335.3	1 kg	glass	246,20 €
Original pack 6 x 1 kg			233,89/1 kg
7335.4	2,5 kg	glass	493,45 €

Reagents for synthesis

Benzoylchloride



Benzoylchloride

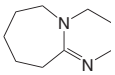
NEW

≥99 %, for synthesis
Benzenecarbonylchloride
C_7H_5ClO
M 140,57 g/mol
D 1,21 · bp ~197 °C
mp -1 °C
[98-88-4]
EC No 202-710-8 · UN No. 1736
ADR 8 II · WGK 1
Danger
H302+H312+H332-H314-H317

Type analysis:
Assay (acidim.). ..... ≥99,0 %
Identity (IR). ..... complies
Density (d 20 °C/4 °C). 1,210-1,214

7456.1	100 ml	glass	11,75 €
7456.2	500 ml	glass	25,70 €
7456.3	1 l	glass	37,55 €
Original pack 6 x 1 l			35,67/1 l
7456.4	2,5 l	glass	69,80 €
Original pack 4 x 2,5 l			66,31/2,5 l

1,8-Diazabicyclo[5.4.0]undec-7-ene



1,8-Diazabicyclo[5.4.0]undec-7-ene

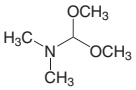
NEW

≥98 %, for synthesis
Base for organic chemistry
DBU
$C_9H_{16}N_2$
M 152,24 g/mol
D 1,02 · bp 80-83 °C
mp -70 °C · flp 116 °C
[6674-22-2]
EC No 229-713-7 · UN No. 2922
ADR 8 (6.1) II · WGK 2
Danger H290-H301-H314-H412

Type analysis:
Appearance. ..... colourless to light yellow liquid
Assay. ..... ≥98 %

6869.1	25 ml	glass	25,70 €
6869.2	100 ml	glass	75,15 €
6869.3	250 ml	glass	139,65 €
6869.4	500 ml	glass	229,90 €

N,N-Dimethylformamide dimethyl acetal



N,N-Dimethylformamide dimethyl acetal

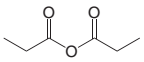
NEW

≥98 %
Derivatization reagent for GC, alkylation agent
$C_5H_{13}NO_2$
M 119,16 g/mol
D 0,897 · bp 104–110 °C
Store at +4 °C
[4637-24-5]
EC No 225-063-3 · UN No. 3271
ADR 3 II · WGK 1
Danger H225-H332-H315-H319

Type analysis:
Appearance. ..... clear liquid
Assay. ..... ≥98 %

6870.1	5 ml	glass	19,90 €
6870.2	25 ml	glass	32,15 €
6870.3	100 ml	glass	106,45 €
6870.4	500 ml	glass	396,70 €

Propionic anhydride



Propionic anhydride

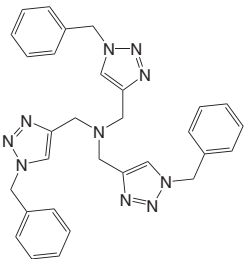
NEW

≥98.5 %, for synthesis
Propanoic anhydride
$C_6H_{10}O_3$
M 130,14 g/mol
D 1,02 · bp 167 °C
mp -45 °C
[123-62-6]
EC No 204-638-2 · UN No. 2496
ADR 8 III · WGK 1
Danger H314

Type analysis:
Assay. ..... ≥98,5 %
Identity (IR). ..... complies
Acetic anhydride ($(CH_3CO)_2O$). ..... <0,05 %

7432.1	100 ml	glass	12,80 €
7432.2	500 ml	glass	27,85 €
7432.3	1 l	glass	44,00 €
Original pack 6 x 1 l			41,80/1 l
7432.4	2,5 l	glass	94,50 €
Original pack 4 x 2,5 l			89,78/2,5 l

Tris[(1-benzyl-1*H*-1,2,3-triazol-4-yl)methyl]amine



Tris[(1-benzyl-1*H*-1,2,3-triazol-4-yl)methyl]amine

NEW

≥97 %
Ligand for Click Chemistry
TBTA
$C_{30}H_{30}N_{10}$
M 530,63 g/mol
mp 142-144 °C
Store at -20 °C
Transport temp.: room temp.
[510758-28-8]
WGK 3

Type analysis:

Appearance	off-white powder
Assay (HPLC)	≥97 %
Identity	complies

7380.1	50 mg	glass	64,40 €
7380.2	500 mg	glass	508,40 €

Salts

Ammonium heptamolybdate tetrahydrate

Ammonium heptamolybdate tetrahydrate

NEW

≥99 %, extra pure
Ammonium molybdate
$(NH_4)_6\ Mo_7O_{24} \cdot 4\ H_2O$
M 1235,86 g/mol
Solubility: 10 g/l (H_2O, 20 °C)
[12054-85-2]
EC No 234-722-4
WGK 1

Type analysis:

Assay	≥99,0 %
Aluminium (Al)	≤0,001 %
Lead (Pb)	≤0,001 %
Iron (Fe)	≤0,001 %
Nickel (Ni)	≤0,0005 %

7311.1	100 g	plastic	20,30 €
7311.2	500 g	plastic	64,40 €
Original pack 6 x 500 g			61,18/500 g
7311.3	1 kg	plastic	106,45 €
Original pack 6 x 1 kg			101,13/1 kg
7311.4	2,5 kg	plastic	235,45 €

Ammonium hexafluorosilicate

Ammonium hexafluorosilicate

NEW

≥98,5 %, extra pure
Ammonium fluorosilicate
$(NH_4)_2SiF_6$
M 178,14 g/mol
D 2,01
mp 145 °C (dec.)
Solubility: 186 g/l (H_2O, 17 °C)
[16919-19-0]
EC No 240-968-3 · UN No. 2854
ADR 6.1 III · WGK 2

Danger H301+H311+H331

Type analysis:

Assay (titr.)	≥98,5 %
Sulphate (SO_4)	≤0,5 %
Water	≤0,5 %
In water insoluble matter	≤0,5 %

7314.1	250 g	plastic	21,40 €
7314.2	500 g	plastic	32,15 €
Original pack 6 x 500 g			30,54/500 g
7314.3	1 kg	plastic	53,65 €
Original pack 6 x 1 kg			50,97/1 kg
7314.4	2,5 kg	plastic	107,40 €

Ammonium hydrogen fluoride

Ammonium hydrogen fluoride

NEW

≥99 %, extra pure
Ammonium bifluoride, Ammonium difluoride
$(NH_4)HF_2$
M 57,04 g/mol
D 1,50 · bp ~240 °C
mp 125 °C
Solubility: 602 g/l (H_2O, 20 °C)
[1341-49-7]
EC No 215-676-4 · UN No. 1727
ADR 8 II · WGK 1

Danger H301-H314

Type analysis:

Assay	≥99,0 %
Chloride (Cl)	≤0,1 %
Iron (Fe)	≤0,05 %
Hexafluorosilicate (SiF_6)	≤0,5 %
Heavy metals (as Pb)	≤0,05 %
Ash content (as SO_4)	≤0,5 %

7313.1	250 g	plastic	18,15 €
7313.2	500 g	plastic	26,75 €
Original pack 6 x 500 g			25,41/500 g
7313.3	1 kg	plastic	40,75 €
Original pack 6 x 1 kg			38,71/1 kg
7313.4	2,5 kg	plastic	85,90 €

Antimony(III) oxide

Antimony(III) oxide

NEW

≥95 %, extra pure
di-Antimony trioxide
Sb_2O_3
M 291,52 g/mol
bp 1425 °C
mp 655 °C
[1309-64-4]
EC No 215-175-0
WGK 2

Warning H351

Type analysis:

Assay	≥95,0 %
Arsenic (As)	≤0,05 %
Lead (Pb)	≤0,5 %
Iron (Fe)	≤0,1 %

7348.1	100 g	plastic	12,80 €
7348.2	500 g	plastic	34,30 €
Original pack 6 x 500 g			32,59/500 g
7348.3	1 kg	plastic	60,10 €
Original pack 6 x 1 kg			57,10/1 kg
7348.4	2,5 kg	plastic	138,70 €

Caesium carbonate

Caesium carbonate

NEW

≥99.9 %, p.a.
Base for organic chemistry
Cs_2CO_3
M 325,82 g/mol
D 4,072
mp 610 °C (dec.)
Solubility: 2615 g/l (H_2O, 15 °C)
[534-17-8]
EC No 208-591-9
WGK 1

Warning H315-H319-H335

Type analysis:

Appearance	Colourless, crystalline and hygroscopic substance
Assay	≥99,9 %
Lithium (Li)	≤0,001 %
Sodium (Na)	≤0,01 %
Potassium (K)	≤0,02 %
Rubidium (Rb)	≤0,02 %
Calcium (Ca)	≤0,001 %
Magnesium (Mg)	≤0,001 %
Barium (Ba)	≤0,005 %
Strontium (Sr)	≤0,001 %
Aluminium (Al)	≤0,001 %
Iron (Fe)	≤0,001 %
Chromium (Cr)	≤0,001 %
P_2O_5	≤0,002 %
Sulphate (SO_4)	≤0,005 %
Chloride (Cl)	≤0,01 %
Nitrate (NO_3)	≤0,003 %
Silicate (SiO_2)	≤0,005 %
Loss on ignition (500 °C)	≤0,5 %

6873.1	5 g	plastic	14,95 €
6873.2	25 g	plastic	31,20 €
6873.3	100 g	plastic	95,70 €
6873.4	500 g	plastic	310,70 €
Original pack 6 x 500 g			295,17/500 g

tri-Calcium dicitrate tetrahydrate

tri-Calcium dicitrate tetrahydrate

NEW

≥97 %, extra pure
Calcium(II) citrate, Tricalcium citrate, TCC
$C_{12}H_{10}Ca_3O_{14} \cdot 4\ H_2O$
M 570,51 g/mol
Solubility: 1 g/l (H_2O, 20 °C)
[5785-44-4]
EC No 212-391-7
WGK 1

Type analysis:

Assay (dry substance)	≥97,0 %
Fluoride (F)	≤0,005 %
Aluminium (Al)	≤0,005 %
Arsenic (As)	≤0,0001 %
Lead (Pb)	≤0,0001 %
Mercury (Hg)	≤0,0001 %
Heavy metals (as Pb)	≤0,0005 %
Loss on drying	10,0-14,0 %

7450.1	500 g	plastic	22,45 €
Original pack 6 x 500 g			21,33/500 g
7450.2	1 kg	plastic	35,35 €
Original pack 6 x 1 kg			33,58/1 kg
7450.3	2,5 kg	plastic	75,15 €

Cobalt(II) sulphate heptahydrate

Cobalt(II) sulphate heptahydrate

NEW

≥97,5 %, extra pure

$CoSO_4 \cdot 7\ H_2O$
M 281,10 g/mol
mp 41 °C (dec.)
Solubility: 383 g/l (H_2O, 25 °C)
[10026-24-1]
EC No 233-334-2 · UN No. 3077
ADR 9 III · WGK 2

Danger
H302-H317-H334-H341-H350i-H360F-H410

Type analysis:

Assay	≥97,5 %
Aluminium (Al)	≤0,005 %
Iron (Fe)	≤0,005 %
Nickel (Ni)	≤0,005 %
In water insoluble matter	≤0,05 %

7327.1	100 g	plastic	13,85 €
7327.2	500 g	plastic	32,15 €
Original pack 6 x 500 g			30,54/500 g
7327.3	1 kg	plastic	53,65 €
Original pack 6 x 1 kg			50,97/1 kg
7327.4	2,5 kg	plastic	120,30 €

Copper(II) carbonate, basic

Copper(II) carbonate, basic

NEW

≥95 %, extra pure
Cupric carbonate
$CuCO_3 \cdot Cu(OH)_2$
M 221,12 g/mol
mp 200 °C (dec.)
[12069-69-1]
EC No 235-113-6
WGK 2

Warning H302

Type analysis:

Assay	≥95,0 %
Assay (Cu)	≥55,0 %
Chloride (Cl)	≤0,05 %
Iron (Fe)	≤0,05 %
Loss on drying	≤0,5 %
Insoluble in HCl	≤0,05 %

7318.1	250 g	plastic	26,75 €
7318.2	500 g	plastic	46,10 €
Original pack 6 x 500 g			43,80/500 g
7318.3	1 kg	plastic	80,50 €
Original pack 6 x 1 kg			76,48/1 kg
7318.4	2,5 kg	plastic	178,35 €

Lithium carbonate

Lithium carbonate

NEW

≥99 %, extra pure
Li_2CO_3
M 73,89 g/mol
D 2,11 · bp 1300 °C
mp 720 °C
Solubility: 13 g/l (H_2O, 20 °C)
[554-13-2]
EC No 209-062-5
WGK 1

Warning H302-H319

Type analysis:

Assay	≥99,0 %
Chloride (Cl)	≤0,05 %
Sulphate (SO_4)	≤0,1 %
Ferric oxide (Fe_2O_3)	≤0,005 %
Insoluble matter	≤0,05 %
Water	≤0,5 %
Loss on ignition	≤1,0 %

7324.1	100 g	plastic	13,85 €
7324.2	500 g	plastic	32,15 €
Original pack 6 x 500 g			30,54/500 g
7324.3	1 kg	plastic	50,40 €
Original pack 6 x 1 kg			47,88/1 kg
7324.4	2,5 kg	plastic	99,85 €
7324.5	5 kg	plastic	187,05 €

Manganese(II) sulphate monohydrate

Manganese(II) sulphate monohydrate

NEW

≥97 %, extra pure
$MnSO_4 \cdot H_2O$
M 169,02 g/mol
D 2,95
Solubility: 762 g/l (H_2O, 20 °C)
[10034-96-5]
EC No 232-089-9 · UN No. 3077
ADR 9 III · WGK 1

Warning H373-H411

Type analysis:

Assay	≥97,0 %
Arsenic (As)	≤0,0005 %
Cadmium (Cd)	≤0,001 %
Mercury (Hg)	≤0,00005 %

7347.1	100 g	plastic	11,30 €
7347.2	500 g	plastic	20,30 €
Original pack 6 x 500 g			19,29/500 g
7347.3	1 kg	plastic	30,00 €
Original pack 6 x 1 kg			28,50/1 kg
7347.4	2,5 kg	plastic	63,30 €

Nickel(II) chloride hexahydrate

Nickel(II) chloride hexahydrate

≥97 %, extra pure
Nickelous chloride
$NiCl_2 \cdot 6\ H_2O$
M 237,70 g/mol
D 1,92
mp 140 °C (dec.)
Solubility: 2540 g/l (H_2O, 20 °C)
[7791-20-0]
EC No 231-743-0 · UN No. 3288
ADR 6.1 III · WGK 3

Danger H301+H331-H315-H317-H334-H341-H350i-H360D-H372-H410

Guarantee analysis:

Assay	≥97,0 %
Arsenic (As)	≤0,001 %
Iron (Fe)	≤0,001 %
Copper (Cu)	≤0,001 %
Insoluble matter	≤0,01 %

7312.1	250 g	plastic	18,15 €
7312.2	500 g	plastic	28,90 €
Original pack 6 x 500 g			27,46/500 g
7312.3	1 kg	plastic	48,25 €
Original pack 6 x 1 kg			45,84/1 kg
7312.4	2,5 kg	plastic	96,65 €

Nickel(II) sulphate hexahydrate

Nickel(II) sulphate hexahydrate

≥98 %, extra pure
$NiSO_4 \cdot 6\ H_2O$
M 262,86 g/mol
D 2,07
mp >100 °C (dec.)
Solubility: 650 g/l (H_2O, 20 °C)
[10101-97-0]
EC No 232-104-9 · UN No. 3288
ADR 6.1 III · WGK 3

Danger H302+H332-H315-H334-H317-H341-H350i-H360D-H372-H400-H410

Type analysis:

Assay	≥98,0 %
Lead (Pb)	≤0,001 %
Iron (Fe)	≤0,001 %
Copper (Cu)	≤0,001 %

7322.1	250 g	plastic	21,40 €
7322.2	500 g	plastic	32,15 €
Original pack 6 x 500 g			30,54/500 g
7322.3	1 kg	plastic	53,65 €
Original pack 6 x 1 kg			50,97/1 kg
7322.4	2,5 kg	plastic	106,45 €

Silver chloride

Silver chloride

≥99 %
AgCl
M 143,32 g/mol
D 5,56 · bp 1547 °C
mp 455 °C
Solubility: ~1,9 mg/l (H_2O, 20 °C)
[7783-90-6]
EC No 232-033-3 · UN No. 3077
ADR 9 III · WGK 2

Warning H400

Type analysis:

Assay	≥99 %
Assay (metals basis)	74,51-75,26 %
Water	≤0,2 %
In NH_4OH insoluble matter	≤0,1 %

6877.1	10 g	plastic	53,65 €
6877.2	25 g	plastic	96,65 €
6877.3	100 g	plastic	256,95 €

Silver nitrate

Silver nitrate

≥99.9 %, p.a., Ultra quality
$AgNO_3$
M 169,88 g/mol
D 4,35 · bp 440 °C (dec.)
mp 209 °C
Solubility: 2150 g/l (H_2O, 20 °C)
[7761-88-8]
EC No 231-853-9 · UN No. 1493
ADR 5.1 II · WGK 3

Danger H272-H314-H400-H410

Type analysis:

Appearance	colorless to white crystalline powder
Assay	≥99,9 %
Water content	≤0,1 %
pH-value (10 % in H_2O)	3,6-5,0
Nitrite (NO_2)	≤0,0002 %
Chloride (Cl)	≤0,001 %
Antimony (Sb)	≤0,00001 %
Bismuth (Bi)	≤0,00001 %
Cadmium (Cd)	≤0,00001 %
Calcium (Ca)	≤0,0005 %
Chromium (Cr)	≤0,00002 %
Copper (Cu)	≤0,00001 %
Gold (Au)	≤0,000001 %
Iridium (Ir)	≤0,0000005 %
Iron (Fe)	≤0,00004 %
Lead (Pb)	≤0,00002 %
Manganese (Mn)	≤0,00001 %
Nickel (Ni)	≤0,00002 %
Palladium (Pd)	≤0,000001 %
Platinum (Pt)	≤0,0000005 %
Potassium (K)	≤0,0005 %
Rhodium (Rh)	≤0,0000005 %
Ruthenium (Ru)	≤0,0000003 %
Selenium (Se)	≤0,00001 %
Sodium (Na)	≤0,008 %
Sulphur (S)	≤0,0008 %
Tellur (Te)	≤0,00004 %
Tin (Sn)	≤0,00001 %
Zinc (Zn)	≤0,00001 %
Particle size	>250 µm

6874.1	10 g	plastic	34,30 €
6874.2	50 g	plastic	128,90 €
6874.3	250 g	plastic	483,65 €

Tin(II) chloride dihydrate

Tin(II) chloride dihydrate

≥98 %, extra pure
Tin dichloride dihydrate, Stannous chloride
$SnCl_2 \cdot 2\ H_2O$
M 225,63 g/mol
D 2,71 · bp 623 °C
mp 38 °C
Solubility: 1780 g/l (H_2O, 10 °C)
[10025-69-1]
EC No 231-868-0 · UN No. 3260
ADR 8 II · WGK 1

Danger H302-H314-H317

Guarantee analysis:

Assay	≥98,0 %
Sulphate (SO_4)	≤0,1 %
Arsenic (As)	≤0,005 %
Iron (Fe)	≤0,02 %
Heavy metals (as Pb)	≤0,1 %

7350.1	100 g	glass	16,00 €
7350.2	500 g	glass	51,50 €
Original pack 6 x 500 g			48,93/500 g
7350.3	1 kg	glass	94,50 €
Original pack 6 x 1 kg			89,78/1 kg
7350.4	2,5 kg	glass	214,50 €

Zinc sulphate heptahydrate

Zinc sulphate heptahydrate

≥97 %, extra pure
Zinc vitriol
$ZnSO_4 \cdot 7\ H_2O$
M 287,54 g/mol
D 1,97
mp 40 °C
Solubility: 965 g/l (H_2O, 20 °C)
[7446-20-0]
EC No 231-793-3 · UN No. 3077
ADR 9 III · WGK 3

Danger H302-H318-H400-H410

Type analysis:

Assay	≥97,0 %
Chloride (Cl)	≤0,5 %
Lead (Pb)	≤0,001 %
Iron (Fe)	≤0,005 %
Nickel (Ni)	≤0,001 %

7316.1	500 g	plastic	16,00 €
Original pack 6 x 500 g			15,20/500 g
7316.2	1 kg	plastic	24,60 €
Original pack 6 x 1 kg			23,37/1 kg
7316.3	2,5 kg	plastic	50,40 €

Silicon oils

Silicone oils MPH

Silicone oil MPH 100

NEW

medium viscous, pharma
Polydimethyl siloxane
WGK 1

Guarantee analysis:

Appearance	complies
Viscosity (25 °C)	95-105 mm²/s
Acid content (HCl)	≤0,0001 %
Volatile parts (1 g, 2 h, 150 °C)	≤0,3 %
Odour	complies
IR-spectrum	complies
UV-spectrum	complies
Heavy metals (as Pb)	≤0,0005 %

6822.1	25 kg	plastic	596,65 €

Silicone oil MPH 350

NEW

medium viscous, pharma
Polydimethyl siloxane
WGK 1

Guarantee analysis:

Appearance	complies
Viscosity (25 °C)	333-368 mm²/s
Acid content (HCl)	≤0,0001 %
Volatile parts (1 g, 2 h, 150 °C)	≤0,3 %
Odour	complies
IR-spectrum	complies
UV-spectrum	complies
Heavy metals (as Pb)	≤0,0005 %

6825.1	25 kg	plastic	596,65 €

Silicone oil PN 1000

Silicone oil PN 1000

NEW

medium viscous, 1000 cSt
Polymethyl phenyl siloxane
WGK 1

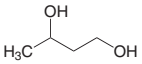
Type analysis:

Viscosity (25 °C)	925-1075 mm²/s
Density (25 °C)	~1,07
Flash point	~285 °C
Combustion point	~425 °C

6826.1	1 kg	plastic	100,95 €
Original pack 6 x 1 kg			95,90/1 kg
6826.2	5 kg	plastic	428,95 €
6826.3	25 kg	plastic	1859,75 €

Solvents

1,3-Butanediol



1,3-Butanediol

NEW

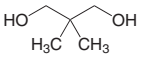
≥99 %, for synthesis
1,3-Butylene glycol
$C_4H_{10}O_2$
M 90,12 g/mol
D 1,01 · bp 204 °C
mp -50 °C
[107-88-0]
EC No 203-529-7
WGK 1

Type analysis:

Assay (GC)	≥99,0 %
Identity (IR)	complies
Water	≤0,2 %

7473.1	250 ml	plastic	20,35 €
7473.2	500 ml	plastic	35,40 €
7473.3	1 l	plastic	62,25 €
Original pack 6 x 1 l			59,14/1 l

2,2-Dimethyl-1,3-propanediol



2,2-Dimethyl-1,3-propanediol

NEW

≥99 %, for synthesis
Neopentyl glycol
$C_5H_{12}O_2$
M 104,14 g/mol
bp ~209°C
mp ~127 °C · flp 103 °C
Solubility: 830 g/l (H_2O, 20 °C)
[126-30-7]
EC No 204-781-0
WGK 1

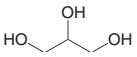
Danger H318

Type analysis:

Assay (dry substance)	≥99,0 %
Colour (APHA)	≤10
Acidity (as CH_3COOH)	≤0,01 %
Aldehyde	≤0,05 %
Water	≤0,5 %

7349.1	100 g	plastic	11,70 €
7349.2	500 g	plastic	21,40 €
Original pack 6 x 500 g			20,33/500 g
7349.3	1 kg	plastic	32,15 €
Original pack 6 x 1 kg			30,54/1 kg
7349.4	2,5 kg	plastic	64,40 €

Glycerol



1,2,3-Propanetriol
$C_3H_8O_3$
M 92,09 g/mol
D 1,26 · bp 290 °C (dec.)
mp 18,2 °C · flp 160 °C
[56-81-5]
EC No 200-289-5
WGK 1

Glycerol

NEW

≥99,7 %, p.a., Ultra-quality, synthetic

Type analysis:

Assay	≥99,7 %
Water	≤0,5 %
Chloride (Cl)	≤0,001 %
Sulphate (SO_4)	≤0,002 %
Sulphated ash	≤0,01 %
Relative density (20/20 °C)	1,260-1,265
Refractive index n_D^{20}	1,470-1,475
Heavy metals	≤0,0005 %
Aluminium (Al)	≤0,00005 %
Barium (Ba)	≤0,00001 %
Boron (B)	≤0,000002 %
Calcium (Ca)	≤0,0001 %
Cadmium (Cd)	≤0,000005 %
Cobalt (Co)	≤0,000005 %
Chromium (Cr)	≤0,000002 %
Copper (Cu)	≤0,000005 %
Iron (Fe)	≤0,00001 %
Magnesium (Mg)	≤0,0001 %
Manganese (Mn)	≤0,00001 %
Nickel (Ni)	≤0,000002 %
Lead (Pb)	≤0,00001 %
Tin (Sn)	≤0,00001 %
Zinc (Zn)	≤0,00001 %

6962.1	1 l	plastic	53,65 €
Original pack 6 x 1 l			50,97/1 l
6962.2	2,5 l	plastic	107,40 €
Original pack 4 x 2,5 l			102,03/2,5 l
6962.3	5 l	plastic	171,90 €
Original pack 2 x 5 l			163,31/5 l
6962.4	10 l	plastic	285,85 €

Glycerol

≥98 %, Ph.Eur., USP, synthetic NEW

Type analysis:

Appearance. ..... clear, colourless liquid
Assay. ..... 98,0-101,0 %
Identity. ..... complies
Water. ..... ≤2,0 %
Colour. ..... complies
Acidity/alkalinity. ..... complies
Ester. ..... complies
Halogen compounds. ..... complies
Aldehydes. ..... ≤0,001 %
Sugar. ..... complies
Chloride (Cl). ..... ≤0,001 %
Sulphate (SO_4). ..... ≤0,002 %
Heavy metals. ..... ≤0,0005 %
Specific density (25/25 °C). ..... ≥1,249
Refractive index n_D^{20}. 1,470-1,475
Ash content. ..... ≤0,01 %
Sulphated ash. ..... ≤0,01 %
Ethylene and diethylene glycol. ..... complies
Related substances. ..... complies
Impurities A, related substances. ..... complies

6967.1	1 l	plastic	37,50 €
Original pack 6 x 1 l			35,63/1 l
6967.2	2,5 l	plastic	75,15 €
Original pack 4 x 2,5 l			71,39/2,5 l
6967.3	5 l	plastic	134,40 €
Original pack 2 x 5 l			127,68/5 l
6967.4	10 l	plastic	235,45 €

n-Heptane

n-Heptane

ROTISOLV® ≥99 %, HPLC NEW

n-Methyl hexane
C_7H_{16}
M 100,20 g/mol
D 0,68 · bp 98 °C
mp -90,5 °C · flp -4 °C
[142-82-5]
EC No 205-563-8 · UN No. 1206
ADR 3 II · WGK 2

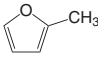
Danger
H225-H304-H400-H410-H315-H336

Guarantee analysis:

Assay (GC). ..... ≥99,0 %
Water (KF). ..... ≤0,01 %
Acidity (as CH_3COOH). ..... ≤0,001 %
Evaporation residue. ..... ≤0,0005 %
Transmission:
245 nm. ..... ≥98 %
220 nm. ..... ≥80 %
200 nm. ..... ≥20 %
Fluorescence (as quinine):
254 nm. ..... ≤1 ppb
365 nm. ..... ≤1 ppb
Filtered through 0.2 µm membrane and filled under protective gas.

6828.1	2,5 l	glass	95,55 €
Original pack 4 x 2,5 l			90,77/2,5 l

2-Methylfuran



2-Methylfuran

≥99 %, for synthesis NEW

Silvan
C_5H_6O
M 82,10 g/mol
D 0,91 · bp ~65 °C
mp -89 °C
Solubility: 3 g/l (H_2O, 20 °C)
[534-22-5]
EC No 208-594-5 · UN No. 2301
ADR 3 II · WGK 1

Danger H225-H330-H301+H311

Type analysis:

Assay. ..... ≥99,0 %
Identity (IR). ..... complies
Density (d 20 °C/4 °C). 0,913-0,916
Furfural. ..... ≤0,5 %
Water. ..... ≤0,1 %

7470.1	100 ml	glass	18,20 €
7470.2	500 ml	glass	48,30 €
7470.3	1 l	glass	76,25 €
Original pack 6 x 1 l			72,44/1 l
7470.4	2,5 l	glass	161,25 €
Original pack 4 x 2,5 l			153,19/2,5 l

2-Methyltetrahydrofuran

2-Methyltetrahydrofuran

≥99 %, extra pure NEW

$C_5H_{10}O$
M 86,13 g/mol
D 0,860 · bp 78-80 °C
mp -136 °C · flp -12 °C
Store at 14 °C
[96-47-9]
EC No 202-507-4 · UN No. 2536
ADR 3 III · WGK 2

Danger H225-H319-H335

Type analysis:

Appearance. ..... clear, colourless liquid
Assay (GC). ..... ≥99 %
Water (KF). ..... ≤0,05 %
Density (20 °C). 0,850-0,865
Stabilized with 150-400 ppm BHT

6845.1	250 ml	glass	21,40 €
6845.2	500 ml	glass	36,00 €
6845.3	1 l	glass	48,90 €
Original pack 6 x 1 l			46,46/1 l
6845.4	2,5 l	glass	92,35 €
Original pack 4 x 2,5 l			87,73/2,5 l
6845.5	10 l	tinplate	321,45 €

Additional package sizes

Acetic acid 100 %

Acetic acid 99-100 %

≥99 %, for synthesis

Glacial acetic acid, Methane carbolic acid, Methyl carbonic acid, Ethanoic acid
$C_2H_4O_2$
M 60,05 g/mol
D 1,05 · bp 118 °C
mp 16,6 °C · flp +40 °C
[64-19-7]
EC No 200-580-7 · UN No. 2789
ADR 8 (3) II · WGK 1

Danger H314-H226-H290

Guarantee analysis:

Assay. ..... ≥99 %
Colour (Hazen). ..... ≤5
Formic acid. ..... ≤0,01 %

7332.1	1 l	plastic	16,05 €
Original pack 6 x 1 l			15,25/1 l
7332.4	2,5 l	plastic	32,15 €
Original pack 4 x 2,5 l			30,54/2,5 l
7332.2	5 l	plastic	56,90 €
Original pack 2 x 5 l			54,06/5 l
7332.3	10 l	plastic	85,50 €
7332.5	25 l	plastic	161,25 €

Ammonium chloride

Salmiaksalt
NH_4Cl
M 53,49 g/mol
D 1,52
mp 340 °C
Solubility: 376 g/l (H_2O, 20 °C)
[12125-02-9]
EC No 235-186-4
WGK 1

Warning H302-H319

Ammonium chloride

≥99.5 %, p.a., ACS, ISO

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

Guarantee analysis:

Assay (arg.). ..... ≥99,5 %
pH-value (5 % solution). 4,5- 5,5
In H_2O insoluble matter. ..... ≤0,005 %
Ash content (as SO_4). ..... ≤0,01 %
Pyridine and homologues. ..... ≤0,001 %
Phosphate (PO_4). ..... ≤0,0002 %
Nitrate (NO_3). ..... ≤0,001 %
Sulphate (SO_4). ..... ≤0,002 %
Iodide (I). ..... ≤0,001 %
Heavy metals (as Pb). ..... ≤0,0005 %
Arsenic (As). ..... ≤0,00005 %
Lead (Pb). ..... ≤0,0005 %
Cadmium (Cd). ..... ≤0,0005 %
Calcium (Ca). ..... ≤0,001 %
Chromium (Cr). ..... ≤0,0005 %
Iron (Fe). ..... ≤0,0002 %
Potassium (K). ..... ≤0,005 %
Cobalt (Co). ..... ≤0,0005 %
Copper (Cu). ..... ≤0,0005 %

Magnesium (Mg) ≤0,0005 %
Sodium (Na) ≤0,005 %
Nickel (Ni) ≤0,0005 %
Zinc (Zn) ≤0,0005 %

K298.1	500 g	plastic	19,25 €
Original pack 6 x 500 g			18,29/500 g
K298.2	1 kg	plastic	31,75 €
Original pack 6 x 1 kg			30,16/1 kg
K298.3	2,5 kg	plastic	51,50 €
K298.5	25 kg	plastic	222,55 €

Ammonium chloride

≥99.5 %, Ph.Eur., USP, BP

Guarantee analysis:

Assay (argentometric, dry substance) 99,5-100,5 %
Identity complies
pH-value (5 % in water) 4,6-6,0
Appearance of solution complies
Loss on drying (100 °C) ≤0,5 %
Ash content (as SO_4) ≤0,1 %
Acid or alkaline react. substances complies
Bromide and Iodide (Br,I) complies
Phosphate (PO_4) ≤0,002 %
Sulphate (SO_4) ≤0,005 %
Thiocyanate (SCN) complies
Arsenic (As) ≤0,0001 %
Lead (Pb) ≤0,001 %
Calcium (Ca) ≤0,02 %
Iron (Fe) ≤0,002 %
Copper (Cu) ≤0,001 %
Magnesium (Mg) ≤0,005 %
Nickel (Ni) ≤0,001 %
Heavy metals (as Pb) ≤0,001 %

P726.1	500 g	plastic	15,60 €
Original pack 6 x 500 g			14,82/500 g
P726.2	1 kg	plastic	24,55 €
Original pack 6 x 1 kg			23,32/1 kg
P726.3	5 kg	plastic	48,30 €
P726.5	25 kg	plastic	144,60 €

Ammonium chloride

≥99 %, cryst.

Type analysis:

Appearance fine white crystals
Assay (NH_4Cl) ≥99,0 %
Iron (Fe) ≤0,0003 %
Sodium chloride (NaCl) ≤0,2 %
Water (KF) ≤0,1 %
Ash ≤0,25 %

5470.1	1 kg	plastic	14,45 €
Original pack 6 x 1 kg			13,73/1 kg
5470.2	5 kg	plastic	37,10 €
5470.3	10 kg	plastic	53,65 €
5470.5	25 kg	plastic	92,35 €

Celite®

Celite® 545

filter aid on silicate basis

Flux calcinated white diatoms
[68855-54-9]
EC No 272-489-0

Type analysis:

Wet density ≤480 g/l
Sieve residue (150 mesh) ≤30 %

0011.3	250 g	plastic	10,65 €
0011.2	1 kg	plastic	19,90 €
Original pack 6 x 1 kg			18,91/1 kg
0011.1	2,5 kg	plastic	27,85 €
0011.4	10 kg	plastic	84,95 €
0011.5	25 kg	plastic	161,25 €

Deuterium oxide

Heavy water, Water D_2
D_2O
M 20,03 g/mol
D ~1,11 · bp 101,4 °C
mp 3,8 °C
[7789-20-0]
EC No 232-148-9

Deuterium oxide

100 Atom%D

For nuclear magnetic resonance spectroscopy.

Guarantee analysis:

Deuterising degree ≥99,97 %
Assay ≤370 Bq/g Tritium

HN81.1	10 ml	glass	22,25 €
HN81.4	10 ml	septum bottle	23,35 €
HN81.2	50 ml	glass	80,55 €
HN81.3	10 x 0,75 ml (glassampoules)		29,60 €

Deuterium oxide

99.8 Atom%D

For nuclear magnetic resonance spectroscopy.

Type analysis:

Deuterising degree ≥99,8 %

6672.1	10 ml	glass	19,90 €
6672.5	10 ml	septum bottle	21,40 €
6672.2	25 ml	glass	38,70 €
6672.3	100 ml	glass	131,70 €
6672.4	500 ml	glass	596,65 €

Ethyl cellulose

[9004-57-3]
WGK 1

Ethyl cellulose

~45 cP, extra pure

Guarantee analysis:

Viscosity 41,0-49,0 cP
Ethoxyl assay 48,0-49,5 %
Loss on drying ≤2,0 %

5023.1	250 g	plastic	35,80 €
5023.3	500 g	plastic	63,35 €
Original pack 6 x 500 g			60,18/500 g
5023.4	1 kg	plastic	112,90 €
Original pack 6 x 1 kg			107,26/1 kg
5023.2	2,5 kg	plastic	262,30 €

Ethyl cellulose

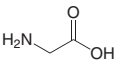
~200 cP, extra pure

Guarantee analysis:

Viscosity 180-220 cP
Ethoxyl assay 48,0-49,5 %
Chloride (as NaCl) ≤0,15 %
Loss on drying ≤2,0 %

9128.1	250 g	plastic	33,15 €
9128.3	500 g	plastic	60,10 €
Original pack 6 x 500 g			57,10/500 g
9128.4	1 kg	plastic	108,60 €
Original pack 6 x 1 kg			103,17/1 kg
9128.2	2,5 kg	plastic	252,65 €

Glycine



Glycine

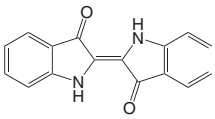
≥98.5 %, Ph.Eur., USP, JP
Buffer substance
α-Aminoacetic acid, Glycocoll
$C_2H_5NO_2$
M 75,07 g/mol
D 1,595
mp 232-236 °C
Solubility: 225 g/l (H_2O, 20 °C)
[56-40-6]
EC No 200-272-2
WGK 1

Guarantee analysis:

Assay (perchl. based on dry substance)	98,5-101,0 %
pH-value (5 % solution)	5,9-6,3
Identity	complies
Chloride (Cl)	≤0,007 %
Sulphate (SO_4)	≤0,006 %
Loss on drying (105 °C)	≤0,2 %
Ash content (as SO_4)	≤0,1 %
Hydrolizable substances	complies
Ninhydrin-positive substances (TLC)	≤0,5 %
Heavy metals (as Pb)	≤0,0005 %
Arsenic (As)	≤0,0001 %
Residual solvents	complies

T873.1	250 g	plastic	22,40 €
T873.3	500 g	plastic	42,90 €
Original pack 6 x 500 g			40,76/500 g
T873.2	1 kg	plastic	69,70 €
Original pack 6 x 1 kg			66,22/1 kg
T873.4	2,5 kg	plastic	161,25 €

Indigo (C.I. 73000)



Indigo (C.I. 73000)

synth.
C.I. 73000
$C_{16}H_{10}N_2O_2$
M 262,27 g/mol
mp >300 °C
Solubility: <1 g/l (H_2O, 20 °C)
[482-89-3]
EC No 207-586-9
WGK 1

Type analysis:

Appearance	violet powder
Maximum absorption	590-615 nm
Solubility (water)	complies
Solubility (EtOH)	complies
Loss on drying (110 °C)	≤0,5 %
Suitability for microscopy	complies

3903.1	50 g	glass	33,25 €
3903.3	100 g	glass	53,65 €
3903.2	500 g	glass	223,50 €
Original pack 6 x 500 g			212,33/500 g

Magnesium chloride hexahydrate

Magnesium chloride hexahydrate

≥98 %, Ph.Eur.
$MgCl_2 \cdot 6\ H_2O$
M 203,3 g/mol
D 1,57
mp 117 °C (dec.)
Solubility: 1670 g/l (H_2O, 20 °C)
[7791-18-6]
EC No 232-094-6
WGK 1

Guarantee analysis:

Appearance	fine, white crystals
Assay	98,0-101,0 %
Identity	complies
Water	51,0-55,0 %
Appearance of solution (10 %)	clear, colourless
In H_2O insoluble matter	≤0,005 %
Acidity (0,01 M NaOH/0,5 g)	≤0,30 ml
Alkalinity (0,01M HCl/0,5 g)	≤0,30 ml
Ammonium (NH_4)	≤0,005 %
Phosphate (PO_4)	≤0,001 %
Sulphate (SO_4)	≤0,01 %
Nitrate (NO_3)	≤0,004 %
Bromide (Br)	≤0,05 %
Heavy metals (as Pb)	≤0,0005 %
Aluminium (Al)	≤0,00005 %
Arsenic (As)	≤0,0002 %
Iron (Fe)	≤0,0005 %
Calcium (Ca)	≤0,1 %
Barium (Ba)	≤0,002 %
Potassium (K)	≤0,05 %
Sodium (Na)	≤0,3 %
Mercury (Hg)	≤0,0001 %

A537.4	500 g	plastic	16,05 €
Original pack 6 x 500 g			15,25/500 g
A537.1	1 kg	plastic	21,75 €
Original pack 6 x 1 kg			20,66/1 kg
A537.5	2,5 kg	plastic	42,90 €
A537.2	10 kg	plastic	133,20 €
A537.3	50 kg	cardboard	579,45 €

Methanol D4

Methanol D4

99.8 Atom%D
For nuclear magnetic resonance spectroscopy.
Methyl alcohol deuterised
CD_3OD
M 36,07 g/mol
D 0,89 · bp 65,5 °C
mp -99 °C · flp 12 °C
[811-98-3]
EC No 212-378-6 · UN No. 1230
ADR 3 (6.1) II · WGK 1

Danger
H225-H301+H311+H331-H370

Guarantee analysis:

Deuterising degree	≥99,8 %
Water (KF, H_2O+D_2O)	≤0,03 %

AE57.1	10 ml	glass	54,75 €
AE57.4	10 ml	septum bottle	55,80 €
AE57.2	50 ml	glass	241,90 €
AE57.3	10 x 0,75 ml	glass-ampoule	54,30 €

N-Methyl-2-pyrrolidone

N-Methyl-2-pyrrolidone

≥99.8 %
NMP
C_5H_9NO
M 99,13 g/mol
D 1,03 · bp 202 °C
mp -24 °C · flp 91 °C
[872-50-4]
EC No 212-828-1
WGK 1

Danger H360D-H315-H319-H335

Guarantee analysis:

Assay (GC)	≥99,8 %
Colour (APHA)	≤50
Water	≤0,05 %
Butyrolactone	≤0,05 %
Monomethylamine	≤0,005 %
Dimethyl pyrrolidones, mixture of isomers	≤0,4 %

4306.1	500 ml	glass	18,75 €
4306.3	1 l	glass	27,85 €
Original pack 6 x 1 l			26,46/1 l
4306.2	2,5 l	glass	52,60 €
Original pack 4 x 2,5 l			49,97/2,5 l
4306.5	25 l	tinplate	418,20 €

Nitro thinner

Nitro thinner

tech.

D 0,830 · bp 57-132 °C
mp <-95 °C · flp -18 °C
UN No. 1993
ADR 3 II · WGK 2

Danger H225-H304-H302+H312+H332-H319-H336-EUH066

3036.5	1 l	tinplate	12,80 €
Original pack 6 x 1 l			12,16/1 l
3036.3	10 l	tinplate	63,35 €
3036.4	25 l	tinplate	117,20 €

Potassium disulphite

Potassium disulphite

≥96 %, powdered

Potassium pyrosulphite, Potassium metabisulphite
$K_2S_2O_5$
M 222,33 g/mol
Solubility: 450 g/l (H_2O, 20 °C)
[16731-55-8]
EC No 240-795-3
WGK 1

Danger H318-H335-EUH031

Type analysis:

Assay.....≥96 %
pH-value (10 % solution).....3,8-4,8
Arsenic (As).....≤0,0001 %
Lead (Pb).....≤0,0001 %
Iron (Fe).....≤0,0005 %
Copper (Cu).....≤0,0001 %
Heavy metals (as Pb).....≤0,001 %
Selenium (Se).....≤0,0001 %
Zinc (Zn).....≤0,0001 %

7995.1	1 kg	plastic	21,40 €
Original pack 6 x 1 kg			20,33/1 kg
7995.3	2,5 kg	plastic	40,75 €
7995.2	10 kg	plastic	125,25 €

Potassium hydroxide

Potassium hydroxide

≥85 %, in flakes

KOH
M 56,11 g/mol
D 2,04 · bp 1327 °C
mp 360 °C
Solubility: 1120 g/l (H_2O, 20 °C)
[1310-58-3]
EC No 215-181-3 · UN No. 1813
ADR 8 II · WGK 1

Danger H314-H290-H302

Type analysis:

Assay (KOH).....≥85 %
Carbonate (as K_2CO_3).....≤1,0 %
Chloride (Cl).....≤0,01 %
Iron (Fe).....≤0,003 %

7986.1	1 kg	plastic	21,00 €
Original pack 6 x 1 kg			19,95/1 kg
7986.3	2,5 kg	plastic	37,55 €
7986.2	10 kg	plastic	98,90 €
7986.5	25 kg	plastic	189,75 €

Potassium hydroxide solution (0.5 N)

Potassium hydroxide solution

0.5 mol/l - 0.5 N volumetric standard solution

[1310-58-3]
EC No 215-181-3 · UN No. 1814
ADR 8 II

Danger H314-H290

Type analysis:

Amount-of-substance conc. (20 °C)...0,5 mol/l ±0,2 %
Titer.....0,998-1,002

N071.1	1 l	plastic	18,95 €
Original pack 6 x 1 l			18,00/1 l
N071.2	5 l	plastic	50,00 €
Original pack 2 x 5 l			47,50/5 l
N071.3	5 l	ROTI®CUBE	41,80 €
Original pack 2 x 5 l			39,71/5 l

Potassium iodide

Potassium iodide

≥99 %, Ph. Eur., BP, USP

KI
M 166,01 g/mol
D 3,13 · bp 1330 °C
mp 681 °C
Solubility: 1430 g/l (H_2O, 20 °C)
[7681-11-0]
EC No 231-659-4
WGK 1

Guarantee analysis:

Assay.....99,0-100,5 %
Appearance of solution.....complies
Alkaline reacting substances.....complies
Iodate (IO_3).....complies
Sulphate (SO_4).....≤0,015 %
Thiosulphate (S_2O_3).....complies
Heavy metals.....≤0,001 %
Iron (Fe).....≤0,002 %
Loss on drying.....≤1 %

8491.1	250 g	glass	55,80 €
8491.3	500 g	glass	99,85 €
Original pack 6 x 500 g			94,86/500 g
8491.2	1 kg	glass	185,45 €
Original pack 6 x 1 kg			176,18/1 kg

Trichloromethane/Chloroform D1

Trichloromethane/Chloroform D1

99.8 Atom%D, stab. with Ag

For nuclear magnetic resonance spectroscopy.
Chloroform D1
CCl_3D
M 120,39 g/mol
D 1,50 · bp 60 °C
mp -64 °C
[865-49-6]
EC No 212-742-4 · UN No. 1888
ADR 6.1 III · WGK 3

Warning H351-H373-H302-H315

Guarantee analysis:

Deuterising degree.....≥99,8 %
Water (KF, H_2O+D_2O).....≤0,02 %

AE54.1	100 ml	glass	40,75 €
AE54.3	100 ml	septum bottle	41,85 €
AE54.2	500 ml	glass	182,25 €