

# Acids & Bases

For different requirements.



## Table of contents

ROTIPURAN® Ultra & Supra	p.	2–4	in Standard Quality	p.	9–11
in VLSI Quality	p.	5	Volumetric Standard Solutions	p.	12–14
for Analysis	p.	6–7	for Specific Uses	p.	15
in Pharmacopoeia Quality	p.	8			

# Acids & Bases

## ROTIPURAN® Ultra/Supra

### Acids, Alkaline Solutions and Water for trace analysis via ICP-OES, ICP-MS, AAS and IC

Carl ROTH provides two high quality product lines, ROTIPURAN® Ultra & Supra specially for research, trace analysis and electronics. These ultrapure reagents are produced using a technologically complex distillation process (subboiling distillation) and are filled only into specially selected, suitable containers under clean room conditions. Very extensive production and quality controls guarantee extremely high quality.

### ROTIPURAN® Ultra – Highest purity grade

This ultrapure product line is characterised for its especially high purity (in ppt-quality) and fulfils the highest purity requirements. The metal content of these products is below 100 ppt [parts per trillion= $10^{-12}$ ] while key metals are under 10 ppt. These products are used in ultra trace analysis (via ICP-OES, ICP-MS, AAS, IC) and for applications in the electronics industry. The reagents are bottled and offered in high class fluoropolymer plastic bottles (PFA and FEP).



### ROTIPURAN® Ultra products at a glance

ppt Quality

Product name	Brand/Purity	Thread	Pack.	Art. No.	Pack Qty.
Acetic acid	ROTIPURAN®Ultra 100 %	38-430	plastic (FEP)	HN65.2	250 ml
				HN65.1	500 ml
				HN65.3	1 l
Ammonia solution	ROTIPURAN®Ultra 20 %	38-430	HDPE	HN66.2	250 ml
				HN66.1	500 ml
				HN66.3	1 l
Hydrobromic acid	ROTIPURAN®Ultra 48 %	38-430	plastic (FEP)	HN67.3	250 ml
				HN67.1	500 ml
				HN67.2	1 l
				HN67.4	2 l
Hydrochloric acid	ROTIPURAN®Ultra 34 %	38-430	plastic (FEP)	HN63.1	250 ml
				HN63.2	500 ml
				HN63.3	1 l
HN63.4	2 l				
Hydrofluoric acid	ROTIPURAN®Ultra 48 %	38-430	plastic (FEP)	HN64.2	250 ml
				HN64.1	500 ml
				HN64.3	1 l
Hydrogen peroxide	ROTIPURAN®Ultra 31 %	38-430	plastic (FEP)	HN69.1	500 ml
				HN60.1	250 ml
Nitric acid	ROTIPURAN®Ultra 69 %	38-430	plastic (FEP)	HN60.2	500 ml
				HN60.3	1 l
				HN60.4	2 l
				HN61.2	250 ml
Perchloric acid	ROTIPURAN®Ultra 70 %	38-430	plastic (FEP)	HN61.1	500 ml
				HN61.3	1 l
				HN62.1	250 ml
Sulphuric acid	ROTIPURAN®Ultra 95 %	38-430	plastic (FEP)	HN62.2	500 ml
				HN62.3	1 l
				HN62.4	2 l
				HN68.1	500 ml
Water	ROTIPURAN®Ultra	38-430	LDPE	HN68.2	1 l
				HN68.3	2 l

Safety-relevant data and further information in the current catalogue and at [www.carlroth.com](http://www.carlroth.com)

# Acids & Bases

## ROTIPURAN® Supra

This supra quality line (**ppb-quality**) is perfectly suitable for sample preparation in trace analysis (e.g. via ICP-OES, AAS, IC, etc.). Over 60 elements are specified and their content is below 1 ppb [parts per billion =10<sup>-9</sup>]. Bottled and delivered in special plastic bottles.



### ROTIPURAN® Supra products at a glance

ppb Quality

Product name	Brand/Purity	Thread	Pack.	Art. No.	Pack Qty.	
Acetic acid	ROTIPURAN®Supra 100 %	GL 45	HDPE	HN55.1	500 ml	
				HN55.3	1 l	
		38-430		HN55.4	2.5 l	
				HN55.5	4 l	
Ammonia solution	ROTIPURAN®Supra 20 %	38-430	HDPE	HN56.1	500 ml	
				HN56.3	4 l	
Hydrochloric acid	ROTIPURAN®Supra 35 %	GL 45	HDPE	HN53.1	500 ml	
		38-430		HN53.2	1 l	
	ROTIPURAN®Supra 30 %			GL 45	HDPE	HN53.3
						HN53.4
Hydrofluoric acid	ROTIPURAN®Supra 48 %	38-430	LDPE	NE57.2	1 l	
				NE57.3	2.5 l	
Nitric acid	ROTIPURAN®Supra 69 %	GL 45	HDPE	HN54.1	500 ml	
				HN50.1	500 ml	
				HN50.2	1 l	
				HN50.3	2.5 l	
Perchloric acid	ROTIPURAN®Supra 70 %	GL 45	HDPE	HN51.1	500 ml	
				HN51.3	1 l	
				HN51.4	2.5 l	
Sulphuric acid	ROTIPURAN®Supra 95 %	GL 45	HDPE	HN52.1	500 ml	
				HN52.2	1 l	
				HN52.5	2.5 l	

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## ROTIPURAN® Ultra/Supra

ROTIPURAN® Low Organic:

TOC (Total Organic Carbon) - content: <20 ppb

Product name	Brand/Purity	Thread	Pack.	Art. No.	Pack Qty.
Water	ROTIPURAN® Low organic	38-430	glass	HN57.1	1 l
				HN57.2	4 l

Safety-relevant data and further information in the current catalogue and at [www.carlroth.com](http://www.carlroth.com)

## Comparison of the properties

### ROTIPURAN® Ultra

- Specified metal content: less than 100 ppt
- Preponderant metals are under 10 ppt
- More than 65 analysed metals
- Produced and bottled under clean room conditions
- Continuous process control for highest product purity
- Bottled exclusively in purified fluoropolymer bottles
- Highest purity and maximum product safety

### ROTIPURAN® Supra

- Maximum metal contamination: <1 ppb
- 60 specified metals
- Produced and filled under clean room conditions
- Bottled in special lightweight bottles for greater safety and easier handling. 2,5 liter bottles have got a handle
- HF is delivered with additional drop spout for safe handling
- Extremely economical purity for most analytic applications

# Acids & Bases

## Accessories for ROTIPURAN® Ultra/Supra

### Dispenser for Ultra-Trace Analysis

#### Ultra / Ultra HF dispenser

For dispensing highly pure acids and alkalis.  
Suitable for use in ultra trace analysis.

#### Features:

- Free of metals
- Made of high quality and highly pure plastics (PTFE, TFM and PFA)
- Calibrated and mechanically tested for precision and accuracy
- 38-430 thread (fits ROTIPURAN® Ultra products)

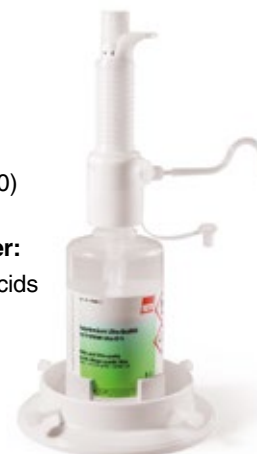
#### Special features of Ultra dispenser:

- Acid cleansed
- Manufactured in cleanroom (class 100)

#### Special features of Ultra HF dispenser:

- Specially for dispensing hydrofluoric acids
- Also suitable for analytical acids

When using bottles with a GL45 thread, please order fastening for dispenser KK11.1 separately.



Model	Vol. (ml)	Graduation (ml)	Tolerance (±ml)	Art. No.	Pack Qty.
Ultra	0,5-5	0,5	0,02	KK97.1	1 Stück
Ultra HF	0,5-5	0,5	0,02	KK98.1	1 Stück

### Accessories for Ultra/Ultra HF dispenser



#### Bottle holder

Stabilises bottle when using a dispenser. The fourscrew system is suitable for both square bottles and round bottles.

The bottle holder is designed for ROTIPURAN® Supra and Ultra bottles with capacities from 250 ml to 2 litres.

Also suitable for bottles with a diameter from approx. 7,0 cm to 11,5 cm.

Product	Art. No.	Pack Qty.
Bottle holder	KK99.1	1 Stück

#### Fastening for Ultra/Ultra HF dispenser to GL45

Made of PTFE. For bottles with GL45 thread, specially for the use of ROTIPURAN® Supra products with Ultra and Ultra HF dispensers.

Product	Art. No.	Pack Qty.
Fastening for ROTIPURAN® Supra (GL45)	KK11.1	1 Stück

# Acids, bases and salt solutions in VLSI quality

## Products in VLSI quality



Carl ROTH's VLSI (Very Large Scale Integration) product line offers solvents and acids for cleaning and etching wafers for the semi-conductor industry. Both processes are essential for chip manufacture. Carl ROTH offers a selected range of products.

### Properties:

- High purity
- Trace metal content usually below 100 ppb
- Particle-filtered, maximal 250 particles/ml

Product name	Purity	Art. No.	Pack Qty.
<b>Ammonia solution</b>	25 %, VLSI Grade	<b>1N1E.1</b>	2.5 l
<b>Ammonium fluoride solution</b>	40 %, VLSI Grade	<b>1N1H.1</b>	5 l
<b>Hydrochloric acid</b>	37 % fuming, VLSI Grade	<b>9787.1</b>	2.5 l
<b>Hydrogen peroxide</b>	30 %, VLSI Grade	<b>9790.1</b>	2.5 l
<b>Nitric acid</b>	69 %, VLSI Grade	<b>1N1K.1</b>	2.5 l
<b>ortho-Phosphoric acid</b>	85 %, VLSI Grade	<b>9788.1</b>	2.5 l
<b>Sulphuric acid</b>	96 %, VLSI Grade	<b>9789.1</b>	2.5 l

Safety-relevant data and further information in the current catalogue and at [www.carlroth.com](http://www.carlroth.com)

VLSI or Very Large Scale Integration means that a large number of transistors (now several 100 million) are located on one chip. Since the gaps are very small, roughly 3 µm, the solvents and acids must be of a correspondingly high purity and be particle-filtered. For VLSI, the number of particles is limited to 250 p/ml.

# Acids in LC-MS quality

## Acids for LC-MS

The basic prerequisite for reliable and reproducible results by means of LC-MS analysis is the use of eluent mixtures of the highest quality. With our acids and solvents, you use high-quality products that you can rely on! High UV permeability, low trace metal content, and certificates of analysis available at any time are the hallmarks of our products. Convince yourself and visit our webshop!

Product name	Purity	Packaging	Art. No.	Pack Qty.
<b>Acetic acid</b>	≥99,9 %, LC-MS Grade	10 x 1 ml glass ampoules	<b>1EHL.2</b>	10 ml
		50 ml	<b>1EHL.1</b>	50 ml
		250 ml	<b>1EHL.3</b>	250 ml
<b>Formic acid</b>	≥99 %, LC-MS Grade	10 x 1 ml glass ampoules	<b>1EHK.2</b>	10 ml
		50 ml	<b>1EHK.1</b>	50 ml
		250 ml	<b>1EHK.3</b>	250 ml
<b>Trifluoroacetic acid (TFA)</b>	≥99,9 %, LC-MS Grade	10 x 1 ml glass ampoules	<b>1EHN.2</b>	10 ml
		50 ml	<b>1EHN.1</b>	50 ml
		250 ml	<b>1EHN.3</b>	250 ml



# ROTIPURAN® Acids & Bases for Analysis

## Acids and Bases for Analysis (p.a.)

Carl ROTH provides suitable acids and bases for different requirements!

- High purity
- High batch consistency
- Detailed specifications
- Good price-performance ratio



Product name	Purity	Pack.	Art. No.	Pack Qty.				
Acetic acid	100 %, p.a.	glass	3738.1	1 l				
		plastic	3738.4	1 l				
		glass	3738.2	2.5 l				
			3738.5	2.5 l				
		plastic	3738.6	5 l				
			3738.3	10 l				
	≥95,9 %, p.a.	plastic		T179.1	1 l			
				T179.2	2.5 l			
				T179.4	5 l			
				T179.3	10 l			
Ammonia solution	30 %, p.a., ACS	glass	CP17.1	1 l				
			CP17.2	2.5 l				
			CP17.3	5 l				
		PE/steel	CP17.4	10 l				
			CP17.5	25 l				
	≥25 %, p.a.	glass		6774.1	1 l			
				6774.2	2.5 l			
			plastic		6774.3	5 l		
					6943.2	250 g		
					6943.4	500 g		
Boric acid	≥99,8 %, p.a., ACS, ISO	plastic		6943.1	1 kg			
				6943.6	2.5 kg			
				6943.3	5 kg			
				6943.5	25 kg			
			Boric acid solution	4 %, p.a.	plastic		HN24.1	1 l
							HN24.4	2.5 l
	HN24.2	5 l						
	HN24.3	10 l						
Formic acid	≥98 %, p.a., ACS	glass	4724.3	500 ml				
			4724.1	1 l				
			4724.2	2.5 l				
		PE/steel	4724.4	10 l				
			4724.5	25 l				
	≥85 %, p.a.	glass		CP16.1	500 ml			
				CP16.2	1 l			
				CP16.3	2.5 l			
			plastic		CP16.4	10 l		
					4625.4	500 ml		
Hydrochloric acid	37 % fuming, p.a., ACS, ISO	glass	4625.1	1 l				
			4625.2	2.5 l				
		plastic		4625.3	10 l			
				4625.5	25 l			
				1LX0.1	500 ml			
	37 % fuming, p.a.	glass	1LX0.2	1 l				
			1LX0.3	2.5 l				
		plastic		1LX0.4	10 l			
				1LX0.5	25 l			

Product name	Purity	Pack.	Art. No.	Pack Qty.	
Hydrochloric acid	≥32 %, p.a., ISO	glass	P074.1	1 l	
		plastic	P074.3	1 l	
		glass	P074.2	2.5 l	
		plastic	P074.4	2.5 l	
	≥25 %, p.a., ISO	glass	6331.1	1 l	
		plastic	6331.3	1 l	
		glass	6331.2	2.5 l	
		plastic	6331.4	2.5 l	
			6331.7	25 l	
			4440.1	25 g	
Molybdato-phosphoric acid hydrate	≥99 %, p.a., ACS	glass	4440.2	50 g	
		plastic	4440.3	100 g	
			4440.7	1 kg	
			2722.1	100 g	
Molybdic acid	≥85 %, p.a., ACS	plastic		2722.2	250 g
				2722.3	500 g
			Nitric acid	100 % fuming, p.a.	glass
	1C8Y.1	1 l			
68–70 %, p.a., ACS, ISO	glass	1C8Y.2		2.5 l	
		4989.3		250 ml	
≥65 %, p.a., ISO	glass		4989.1	1 l	
			4989.2	2.5 l	
		plastic		4989.4	2.5 l
				9216.1	500 ml
Perchloric acid	70 %, p.a.	glass		9216.2	1 l
				3257.3	50 g
Periodic acid	≥99 %, p.a.	glass		3257.1	100 g
				3257.2	500 g
				3257.4	1 kg
			meta-Phosphoric acid	p.a., pieces (hyaline)	plastic
	CN91.2	250 g			
	CN91.3	500 g			
	CN91.4	1 kg			
ortho-Phosphoric acid	≥85 %, p.a., ISO	plastic		6366.3	500 ml
				6366.1	1 l
				6366.2	2.5 l
Potassium hydroxide	≥85 %, p.a., in pellets	plastic		6366.4	5 l
				6751.3	250 g
				6751.1	1 kg
				6751.4	2.5 kg
				6751.2	5 kg
				6751.6	10 kg
				6751.5	25 kg

# ROTIPURAN® Acids & Bases for Analysis



Product name	Purity	Pack.	Art. No.	Pack Qty.
Sodium hydroxide	≥98 %, p.a., ISO, in pellets	plastic	6771.3	500 g
			6771.1	1 kg
			6771.4	2.5 kg
			6771.2	5 kg
			6771.6	10 kg
			6771.5	25 kg
	≥97 %, p.a., ACS, in pellets	plastic	1CCX.1	500 g
			1CCX.2	1 kg
			1CCX.3	2.5 kg
			1CCX.4	5 kg
			1CCX.5	10 kg
			1CCX.6	25 kg
Sulphuric acid	96 %, p.a., ISO	glass	4623.3	250 ml
		plastic	4623.1	1 l
		plastic	4623.4	1 l
		glass	4623.2	2.5 l
		plastic	4623.5	2.5 l
		plastic	4623.6	10 l
Trichloroacetic acid	≥99 %, p.a.	glass	8789.3	100 g
			8789.4	250 g
			8789.2	500 g
			8789.1	1 kg
Trichloroacetic acid solution	20 % in water, p.a.	glass	7437.1	1 l
	10 % in water, p.a.	glass	9383.2	1 l
		plastic	9383.1	10 l

Safety-relevant data and further information in the current catalogue and at [www.carlroth.com](http://www.carlroth.com)

## Further Acids and Bases for Analysis (p.a.)

Product name	Purity	Pack.	Art. No.	Pack Qty.
L(+)-Ascorbic acid	≥99 %, p.a.	plastic	3525.1	100 g
			3525.2	250 g
			3525.3	500 g
Barium hydroxide octahydrate	≥98 %, p.a., ACS, ISO	plastic	P009.2	250 g
			P009.1	500 g
			P009.3	1 kg
Benzoic acid	≥99,5 %, p.a., ACS	plastic	P738.1	100 g
			P738.2	250 g
Calcium hydroxide	≥96 %, p.a.	plastic	CN87.1	500 g
			CN87.2	1 kg
			CN87.3	2.5 kg
Citric acid	≥99,5 %, p.a., ACS, anhydrous	plastic	X863.1	500 g
			X863.2	1 kg
			X863.3	2.5 kg
			X863.4	5 kg
			X863.6	10 kg
			X863.5	25 kg
Citric acid monohydrate	≥99,5 %, p.a., ACS, ISO	plastic	3958.2	500 g
			3958.1	1 kg
			3958.3	2.5 kg
			3958.4	5 kg
			3958.6	10 kg
Phosphotungstic acid hydrate	p.a., cryst.	glass	2635.1	50 g
			2635.2	100 g
			2635.3	250 g
			2635.4	500 g
			2723.1	250 g
Salicylic acid	≥99 %, p.a., ACS	plastic	2723.2	500 g
			2723.3	1 kg
			2725.1	250 g
Succinic acid	≥99 %, p.a., ACS	plastic	2725.2	500 g
			2725.3	1 kg
			P725.1	500 g
Sulphamic acid	≥99,3 %, p.a., ACS	plastic	P725.2	1 kg
			P725.3	2.5 kg
			4496.1	100 g
Sulphanilic acid	≥98 %, p.a., ACS	plastic	4496.2	500 g
			K302.1	250 g
L(+)-Tartaric acid	≥99,5 %, p.a., ACS, ISO	plastic	K302.2	1 kg
			K302.5	25 kg
			0747.1	25 g
Tungstic acid	≥99 %, p.a.	plastic	0747.2	100 g
			0747.3	500 g

# Acids & Bases in Pharmacopoeia Quality

## Acids

Product name	Purity	Pack.	Art. No.	Pack Qty.
<b>Acetic acid</b>	100 %, Ph. Eur., extra pure	glass	6755.1	1 l
			6755.2	2.5 l
		plastic	6755.3	5 l
			6755.4	10 l
			6755.5	25 l
<b>Boric acid</b>	≥99,5 %, Ph. Eur., USP, BP	plastic	P010.1	500 g
			P010.2	1 kg
			P010.3	2.5 kg
			P010.5	25 kg
<b>Citric acid</b>	≥99,5 %, Ph. Eur., anhydrous	plastic	6490.3	500 g
			6490.1	1 kg
			6490.4	2.5 kg
			6490.2	5 kg
			6490.6	10 kg
			6490.5	25 kg
<b>Citric acid monohydrate</b>	≥99,5 %, Ph. Eur.	plastic	5110.3	500 g
			5110.1	1 kg
			5110.4	2.5 kg
			5110.2	5 kg
			5110.6	10 kg
			5110.5	25 kg
<b>Hydrochloric acid</b>	37 % fuming, Ph. Eur.	glass	2607.1	1 l
			2607.2	2.5 l
		plastic	2607.3	10 l
			2607.4	25 l
			2608.1	1 l
<b>ortho-Phosphoric acid</b>	85 %, Ph. Eur.	plastic	2608.2	2.5 l
			2608.3	5 l
			2608.4	10 l
			2609.1	1 l
			2609.2	2.5 l
<b>Sulphuric acid</b>	95–98 %, Ph. Eur.	glass	2609.3	10 l
			2609.4	25 l
		plastic		
<b>Trichloroacetic acid</b>	≥99 %, Ph. Eur., extra pure	glass	3744.3	100 g
			3744.4	250 g
			3744.2	500 g
			3744.1	1 kg

## Bases

Product name	Purity	Pack.	Art. No.	Pack Qty.
<b>Ammonia solution</b>	25 %, Ph. Eur.	glass	2610.1	1 l
			2610.2	2.5 l
		plastic	2610.4	5 l
			2610.3	10 l
<b>Calcium hydroxide</b>	≥95 %, Ph. Eur., USP, BP	plastic	KK03.1	500 g
			KK03.2	1 kg
			KK03.4	2.5 kg
			KK03.3	5 kg
<b>Magnesium hydroxide</b>	≥95 %, Ph. Eur.	plastic	9453.1	100 g
			9453.2	500 g
			9453.3	1 kg
			2684.1	100 g
	≥95 %, Ph. Eur., USP, granulated	plastic	2684.2	500 g
			2684.3	1 kg
			2684.4	2.5 kg
			2684.5	25 kg
<b>Potassium hydroxide</b>	≥85 %, Ph. Eur., in pellets	plastic	P747.1	500 g
			P747.2	1 kg
			P747.6	2.5 kg
			P747.3	5 kg
			P747.5	10 kg
			P747.4	25 kg
<b>Sodium hydroxide</b>	≥98 %, Ph. Eur., USP, BP, in pellets	plastic	P031.1	500 g
			P031.2	1 kg
			P031.4	2.5 kg
			P031.3	5 kg
			P031.5	10 kg
			P031.7	25 kg

Safety-relevant data and further information in the current catalogue and at [www.carlroth.com](http://www.carlroth.com)





# Acids & Bases in Standard Quality

## Acids



Product name	Purity	Pack.	Art. No.	Pack Qty.		
<b>Acetic acid</b>	≥99 %, for synthesis	plastic	7332.1	1 l		
			7332.4	2.5 l		
			7332.2	5 l		
			7332.3	10 l		
			7332.5	25 l		
	≥95,9 %, extra pure	plastic	X895.1	1 l		
			X895.2	2.5 l		
			X895.4	5 l		
			X895.3	10 l		
			6740.1	1 l		
	80 %, pure	plastic	6740.2	2.5 l		
			6740.3	5 l		
			6740.4	10 l		
			7329.1	1 l		
	60 %, pure	plastic	7329.4	2.5 l		
			7329.3	5 l		
			7329.2	10 l		
			7329.5	25 l		
			1EE0.1	1 l		
	40 %, pure	plastic	1EE0.2	2.5 l		
			1EE0.3	5 l		
			1EE0.4	10 l		
			1EE0.5	25 l		
			1ECY.1	1 l		
	30 %, pure	plastic	1ECY.2	2.5 l		
			1ECY.3	5 l		
			1ECY.4	10 l		
			1ECY.5	25 l		
			4340.1	1 l		
	25 %, pure	plastic	4340.5	2.5 l		
			4340.2	5 l		
			4340.3	10 l		
4340.4			25 l			
20 %, pure	plastic	1ECX.1	1 l			
		1ECX.2	2.5 l			
		1ECX.3	5 l			
		1ECX.4	10 l			
		1ECX.5	25 l			
10 %, pure	plastic	4341.1	1 l			
		4341.5	2.5 l			
		4341.2	5 l			
		4341.3	10 l			
		4341.4	25 l			
		5935.1	1 kg			
		5935.2	5 kg			
		5935.4	25 kg			
<b>Boric acid</b>	≥99,8 %	plastic	5935.3	50 kg		
			4742.1	1 l		
			4742.2	2.5 l		
			4742.4	5 l		
			4742.3	10 l		
	≥98 %, for synthesis	glass	5355.1	1 l		
			5355.2	2.5 l		
			plastic	5355.4	5 l	
				5355.3	10 l	
				6739.1	1 l	
		≥85 %, pure	glass	6739.2	2.5 l	
				plastic	6739.4	5 l
					6739.3	10 l
					6739.5	25 l

Product name	Purity	Pack.	Art. No.	Pack Qty.
<b>Hydrochloric acid</b>	37 % fuming, extra pure	glass	9277.1	1 l
		plastic	9277.4	1 l
		glass	9277.2	2.5 l
		plastic	9277.5	2.5 l
		plastic	9277.3	10 l
	37 % fuming, technical	glass	7476.1	1 l
			7476.2	2.5 l
			7476.3	10 l
			7476.4	25 l
	32 %, extra pure	plastic	X896.1	1 l
			X896.2	2.5 l
			X896.3	10 l
	≥30 %, technical	plastic	X896.7	25 l
			9280.3	1 l
	25 %, extra pure	plastic	9280.1	10 l
			9280.4	25 l
			X897.1	1 l
			X897.2	2.5 l
			X897.3	10 l
			0992.4	1 l
			0992.1	2.5 l
			0992.2	10 l
			0992.3	25 l
			20 %, technical	plastic
	4326.2	2.5 l		
	4326.3	5 l		
	4326.4	10 l		
	4322.1	1 l		
	15 %, technical	plastic	4322.2	2.5 l
			4322.3	5 l
			4322.4	10 l
			0710.4	1 l
10 %, technical	plastic	0710.1	2.5 l	
		0710.2	5 l	
		0710.3	10 l	
5 %, technical	plastic	4328.1	1 l	
		4328.2	2.5 l	
		4328.3	5 l	
		4328.4	10 l	
<b>Nitric acid</b>	68 %, extra pure	glass	2616.1	250 ml
			2616.2	1 l
			2616.3	2.5 l
	65 %, pure	glass	X898.1	1 l
			X898.2	2.5 l
	60 %, pure	glass	6745.1	1 l
			6745.5	2.5 l

# Acids & Bases in Standard Quality

## Acids

Product name	Purity	Pack.	Art. No.	Pack Qty.	
Nitric acid	53 %, pure	glass	9274.1	1 l	
			9274.3	2.5 l	
			9274.4	5 l	
		plastic	9274.2	10 l	
			9274.5	25 l	
	40 %, pure	glass	6748.1	1 l	
			6748.2	5 l	
		plastic	6748.3	10 l	
			6748.4	25 l	
	25 %, pure	plastic	4339.1	1 l	
			4339.2	5 l	
			4339.3	10 l	
			4339.4	25 l	
	20 %, pure	plastic	4337.1	1 l	
			4337.2	2.5 l	
4337.3			5 l		
4337.4			10 l		
Periodic acid	≥99 %, for synthesis	glass	2612.1	50 g	
			2612.2	100 g	
			2612.3	500 g	
ortho-Phosphoric acid	85 %, extra pure	plastic	9079.1	1 l	
			9079.2	2.5 l	
			9079.3	10 l	
	75 %, extra pure	plastic	2614.1	1 l	
			2614.2	2.5 l	
			2614.3	5 l	
			2614.4	10 l	
	50 %, extra pure	plastic	4336.1	1 l	
			4336.2	2.5 l	
			4336.3	5 l	
		plastic	4336.4	10 l	
			4334.1	1 l	
			4334.2	2.5 l	
	40 %, extra pure	plastic	4334.3	5 l	
			4334.4	10 l	
4332.1			1 l		
4332.2			2.5 l		
25 %, extra pure	plastic	4332.3	5 l		
		4332.4	10 l		
		2620.1	100 g		
Phosphorous acid	≥98 %, cryst.	glass	2620.2	500 g	
			2620.3	1 kg	
			6026.2	500 ml	
Propionic acid	≥99,5 %, for synthesis	glass	6026.1	1 l	
			6026.3	2.5 l	
			9316.1	1 l	
Sulphuric acid	96 %, pure	glass	9316.2	2.5 l	
			plastic	9316.3	10 l
				9316.4	25 l
		96 %, technical	plastic	0971.1	1 l
				0971.2	2.5 l
	0971.3			10 l	
	0971.4			25 l	
	4319.1			1 l	
	75 %, pure	plastic	4319.2	2.5 l	
			4319.3	5 l	
			4319.4	10 l	
			4319.5	25 l	

Product name	Purity	Pack.	Art. No.	Pack Qty.
Sulphuric acid	50 %, pure	plastic	4318.1	1 l
			4318.2	2.5 l
			4318.3	5 l
			4318.4	10 l
			4316.1	1 l
	40 %, pure	plastic	4316.2	2.5 l
			4316.5	5 l
			4316.3	10 l
			4316.4	25 l
			4312.1	1 l
	37 %, technical, battery acid, accumulator acid	plastic	4312.2	2.5 l
			4312.5	5 l
			4312.3	10 l
			4312.4	25 l
			X876.1	1 l
	30 %, pure	plastic	X876.2	2.5 l
			X876.4	5 l
			X876.3	10 l
			X876.5	25 l
			0967.1	1 l
	25 %, extra pure	plastic	0967.2	2.5 l
			0967.5	5 l
			0967.3	10 l
			0967.4	25 l
			4300.4	1 l
20 %, pure	plastic	4300.1	2.5 l	
		4300.5	5 l	
		4300.2	10 l	
		4300.3	25 l	
		3526.1	1 l	
10 %, pure	plastic	3526.2	2.5 l	
		3526.3	5 l	
		3526.4	10 l	
		3526.5	25 l	
		2800.1	1 l	
2 %, pure	plastic	2800.2	2.5 l	
		2800.3	5 l	
		2800.4	10 l	
		2800.5	25 l	
		9328.1	1 l	
Sulphurous acid	~6 % SO <sub>2</sub> in H <sub>2</sub> O	glass	9328.1	1 l
		PE/steel	9328.2	10 l
Trifluoroacetic acid (TFA)	≥99,9 %, for peptide synthesis	glass	P088.1	100 ml
			P088.2	500 ml
			P088.3	1 l
	≥99,9 %	glass	6957.1	500 ml
			6957.2	1 l
6957.3	2.5 l			

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# Acids & Bases in Standard Quality

## Bases

Product name	Purity	Pack.	Art. No.	Pack Qty.	Product name	Purity	Pack.	Art. No.	Pack Qty.
<b>Ammonia solution</b>	30–33 %, extra pure	glass	<b>P093.1</b>	1 l	<b>Potassium hydroxide solution</b>	20 %, pure	plastic	<b>4330.1</b>	1 l
		PE/steel	<b>P093.2</b>	2.5 l				<b>4330.2</b>	2.5 l
			<b>P093.3</b>	10 l				<b>4330.3</b>	5 l
	≥25 %, extra pure	plastic	<b>5460.1</b>	1 l				<b>4330.4</b>	10 l
			<b>5460.2</b>	5 l				<b>4330.5</b>	25 l
			<b>5460.3</b>	10 l	<b>9356.1</b>	1 kg			
			<b>5460.4</b>	30 l	<b>9356.4</b>	2.5 kg			
			<b>6753.1</b>	1 l	<b>9356.3</b>	5 kg			
	20 %, pure	plastic	<b>6753.2</b>	5 l	<b>9356.2</b>	10 kg			
			<b>6753.3</b>	10 l	<b>9356.5</b>	25 kg			
			<b>6753.4</b>	25 l	<b>8655.1</b>	1 l			
			<b>4346.1</b>	1 l	<b>8655.3</b>	2.5 l			
			<b>4346.5</b>	2.5 l	<b>8655.4</b>	5 l			
	15 %, extra pure	plastic	<b>4346.2</b>	5 l	<b>8655.2</b>	10 l			
			<b>4346.3</b>	10 l	<b>8655.5</b>	25 l			
			<b>4346.4</b>	25 l	<b>0993.1</b>	1 l			
			<b>6756.1</b>	1 l	<b>0993.2</b>	2.5 l			
			<b>6756.5</b>	2.5 l	<b>0993.5</b>	5 l			
10 %, pure	plastic	<b>6756.2</b>	5 l	<b>0993.3</b>	10 l				
		<b>6756.3</b>	10 l	<b>0993.4</b>	25 l				
		<b>6756.4</b>	25 l	<b>4347.1</b>	1 l				
		<b>HN75.1</b>	500 g	<b>4347.2</b>	2.5 l				
		<b>HN75.2</b>	1 kg	<b>4347.5</b>	5 l				
<b>Barium hydroxide octahydrate</b>	≥98 %, extra pure	plastic	<b>HN75.3</b>	2.5 kg	<b>4347.3</b>	10 l			
			<b>3529.4</b>	1 kg	<b>4347.4</b>	25 l			
			<b>3529.1</b>	2.5 kg	<b>T197.1</b>	1 l			
<b>Calcium hydroxide</b>	≥96 %, powdered	plastic	<b>3529.2</b>	10 kg	<b>T197.2</b>	2.5 l			
			<b>3529.3</b>	50 kg	<b>T197.4</b>	5 l			
			<b>9864.1</b>	100 g	<b>T197.3</b>	10 l			
			<b>9864.2</b>	500 g	<b>T197.5</b>	30 l			
<b>Copper(II) hydroxide</b>	≥97,5 %, extra pure	plastic	<b>9864.3</b>	1 kg	<b>4351.1</b>	1 l			
			<b>9864.4</b>	2.5 kg	<b>4351.2</b>	2.5 l			
			<b>6705.1</b>	25 g	<b>4351.5</b>	5 l			
<b>Lithium hydroxide</b>	≥99 %, anhydrous	plastic	<b>6705.2</b>	100 g	<b>4351.3</b>	10 l			
			<b>6705.3</b>	250 g	<b>4351.4</b>	25 l			
			<b>3997.1</b>	250 g	<b>4357.1</b>	1 l			
<b>Lithium hydroxide monohydrate</b>	≥56,5 % LiOH	plastic	<b>3997.2</b>	1 kg	<b>4357.2</b>	2.5 l			
			<b>A122.1</b>	200 ml	<b>4357.5</b>	5 l			
<b>Piperidine</b>	≥99,5 %, for peptide synthesis	glass	<b>A122.2</b>	500 ml	<b>4357.3</b>	10 l			
			<b>A122.3</b>	1 l	<b>4357.4</b>	25 l			
			<b>A122.4</b>	2.5 l	<b>4358.1</b>	1 l			
			<b>7986.1</b>	1 kg	<b>4358.2</b>	2.5 l			
<b>Potassium hydroxide</b>	≥85 %, in sheds	plastic	<b>7986.3</b>	2.5 kg	<b>4358.5</b>	5 l			
			<b>7986.4</b>	5 kg	<b>4358.3</b>	10 l			
			<b>7986.2</b>	10 kg	<b>4358.4</b>	25 l			
			<b>7986.5</b>	25 kg	<b>4359.1</b>	1 l			
			<b>7949.1</b>	1 l	<b>4359.2</b>	2.5 l			
<b>Potassium hydroxide solution</b>	50 %, extra pure	plastic	<b>7949.3</b>	2.5 l	<b>4359.5</b>	5 l			
			<b>7949.4</b>	5 l	<b>4359.3</b>	10 l			
			<b>7949.2</b>	10 l	<b>4359.4</b>	25 l			
			<b>7949.5</b>	25 l	<b>2864.1</b>	1 l			
			<b>0995.1</b>	1 l	<b>2864.2</b>	2.5 l			
	45 %, extra pure	plastic	<b>0995.2</b>	2.5 l	<b>2864.3</b>	5 l			
			<b>0995.4</b>	5 l	<b>2864.4</b>	10 l			
			<b>0995.3</b>	10 l	<b>2864.5</b>	25 l			
			<b>0995.5</b>	25 l					

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# Acids & Bases Volumetric Standard Solutions

## Volumetric Standard Solutions, ready-to-use

The advantages of this over making them yourself are:

- Manufactured and tested using modern manufacturing and analytical methods
- Ready-to-use solutions
- High accuracy for precise analyses
- Application of NIST-certified reference substances for checking
- Connection to standard titrators is possible



Product name	Purity	Pack.	Art. No.	Pack Qty.
<b>Acetic acid</b>	1 mol/l – 1 N, volumetric standard solution	plastic	<b>KK62.1</b>	1 l
	2 mol/l – 2 N, volumetric standard solution	plastic	<b>9883.1</b> <b>9883.2</b>	500 ml 1 l
	5 mol/l – 5 N, volumetric standard solution	plastic	<b>1E33.1</b>	1 l
<b>Ammonia solution</b>	4 mol/l – 4 N, volumetric standard solution	plastic	<b>9897.1</b> <b>9897.2</b>	500 ml 1 l
<b>Barium hydroxide solution</b>	0,05 mol/l – 0,1 N, volumetric standard solution	plastic	<b>N054.1</b>	1 l
<b>Hydrochloric acid</b>	0,01 mol/l – 0,01 N, volumetric standard solution	plastic	<b>N075.1</b>	1 l
	0,02 mol/l – 0,02 N, volumetric standard solution	plastic	<b>1E2H.1</b>	1 l
	0,05 mol/l – 0,05 N, volumetric standard solution	plastic	<b>8085.1</b>	1 l
		plastic	<b>8085.2</b>	2.5 l
		ROTI®CUBE	<b>8085.3</b>	5 l
	0,1 mol/l – 0,1 N, volumetric standard solution	plastic	<b>K024.5</b>	500 ml
		plastic	<b>K024.1</b>	1 l
		plastic	<b>K024.2</b>	5 l
		ROTI®CUBE	<b>K024.3</b>	5 l
		plastic	<b>K024.4</b>	10 l
	0,2 mol/l – 0,2 N, volumetric standard solution	plastic	<b>K024.7</b>	25 l
		plastic	<b>4120.1</b>	1 l
	0,5 mol/l – 0,5 N, volumetric standard solution	plastic	<b>P708.1</b>	1 l
		plastic	<b>P708.2</b>	5 l
	1 mol/l – 1 N, volumetric standard solution	ROTI®CUBE	<b>P708.3</b>	5 l
		plastic	<b>P708.4</b>	10 l
		plastic	<b>K025.1</b>	1 l
		ROTI®CUBE	<b>K025.2</b>	5 l
	2 mol/l – 2 N, volumetric standard solution	plastic	<b>K025.3</b>	5 l
		plastic	<b>K025.4</b>	10 l
ROTI®CUBE		<b>T134.4</b>	500 ml	
3 mol/l – 3 N, volumetric standard solution	plastic	<b>T134.1</b>	1 l	
	plastic	<b>T134.2</b>	5 l	
4 mol/l – 4 N, volumetric standard solution	ROTI®CUBE	<b>T134.3</b>	5 l	
	plastic	<b>1E2E.1</b>	1 l	
	plastic	<b>N076.1</b>	1 l	
	plastic	<b>N076.2</b>	2.5 l	
	plastic	<b>N076.3</b>	5 l	
5 mol/l – 5 N, volumetric standard solution	plastic	<b>N076.4</b>	10 l	
	plastic	<b>N076.5</b>	25 l	
6 mol/l – 6 N, volumetric standard solution	plastic	<b>1E2C.1</b>	1 l	
10 mol/l – 10 N, volumetric standard solution	plastic	<b>0281.1</b>	1 l	
		plastic	<b>0226.1</b>	1 l

Product name	Purity	Pack.	Art. No.	Pack Qty.
<b>Hydrochloric acid in ethanol</b>	0,1 mol/l – 0,1 N, volumetric standard solution	glass	<b>3080.1</b>	1 l
	0,5 mol/l – 0,5 N, volumetric standard solution	glass	<b>3091.1</b>	1 l
	1 mol/l – 1 N, volumetric standard solution	glass	<b>2988.1</b>	1 l
<b>Hydrochloric acid in 2-propanol</b>	0,1 mol/l – 0,1 N, volumetric standard solution	glass	<b>2943.1</b>	1 l
	0,5 mol/l – 0,5 N, volumetric standard solution	glass	<b>2980.1</b>	1 l
<b>Nitric acid</b>	0,1 mol/l – 0,1 N, volumetric standard solution	plastic	<b>KK73.1</b>	1 l
	1 mol/l – 1 N, volumetric standard solution	plastic	<b>N070.1</b>	1 l
	2 mol/l – 2 N, volumetric standard solution	plastic	<b>9887.1</b> <b>9887.2</b>	500 ml 1 l
<b>Oxalic acid solution</b>	0,05 mol/l – 0,1 N, volumetric standard solution	plastic	<b>CN35.1</b>	1 l
	0,1 mol/l – 0,2 N, volumetric standard solution	plastic	<b>0764.1</b>	1 l
	0,25 mol/l – 0,5 N, volumetric standard solution	plastic	<b>1E2L.1</b>	1 l
	0,1 mol/l – 0,1 N, volumetric standard solution, in anhydrous acetic acid	glass	<b>K023.1</b>	1 l
<b>Perchloric acid</b>	1 mol/l – 1 N, volumetric standard solution, in water	glass	<b>1E2K.1</b>	1 l
	0,1 mol/l – 0,3 N, volumetric standard solution	plastic	<b>8089.1</b>	1 l
<b>ortho-Phosphoric acid</b>	1/6 mol/l – 0,5 N, volumetric standard solution	plastic	<b>8091.1</b>	1 l
	1 mol/l – 3 N, volumetric standard solution	plastic	<b>8141.1</b>	1 l
	0,01 mol/l – 0,01 N, volumetric standard solution	plastic	<b>1E31.1</b>	1 l
<b>Potassium hydroxide solution</b>	0,1 mol/l – 0,1 N, volumetric standard solution	plastic	<b>K018.1</b>	1 l
	0,1 mol/l – 0,1 N, volumetric standard solution	plastic	<b>K018.2</b>	5 l
		ROTI®CUBE	<b>K018.3</b>	5 l
	0,5 mol/l – 0,5 N, volumetric standard solution	plastic	<b>N071.1</b>	1 l
		plastic	<b>N071.2</b>	5 l
		ROTI®CUBE	<b>N071.3</b>	5 l
	1 mol/l – 1 N, volumetric standard solution	plastic	<b>K017.1</b>	1 l
3 mol/l – 3 N, volumetric standard solution	plastic	<b>K017.2</b>	5 l	
	ROTI®CUBE	<b>K017.3</b>	5 l	
<b>Potassium hydroxide solution in ethanol</b>	0,05 mol/l – 0,05 N, volumetric standard solution	plastic	<b>1E32.1</b>	1 l
	0,05 mol/l – 0,05 N, volumetric standard solution	glass	<b>0765.1</b>	1 l
	0,1 mol/l – 0,1 N, volumetric standard solution	glass	<b>P706.1</b>	1 l
	0,5 mol/l – 0,5 N, volumetric standard solution	glass	<b>P707.1</b>	1 l

# Acids & Bases Volumetric Standard Solution



Product name	Purity	Pack.	Art. No.	Pack Qty.
<b>Potassium hydroxide solution in methanol</b>	0,1 mol/l – 0,1 N, volumetric standard solution	glass	<b>KK66.1</b>	1 l
	0,5 mol/l – 0,5 N, volumetric standard solution	glass	<b>KK67.1</b>	1 l
<b>Potassium hydroxide solution in isopropanol</b>	0,1 mol/l – 0,1 N, volumetric standard solution	glass	<b>KK68.1</b>	1 l
<b>Sodium hydroxide solution</b>	0,01 mol/l – 0,01 N, volumetric standard solution	plastic	<b>N073.1</b>	1 l
	0,05 mol/l – 0,05 N, volumetric standard solution	plastic	<b>0224.1</b>	1 l
	0,1 mol/l – 0,1 N, volumetric standard solution	plastic	<b>K020.1</b>	1 l
		plastic	<b>K020.2</b>	5 l
		ROTI®CUBE	<b>K020.3</b>	5 l
		ROTI®CUBE	<b>K020.4</b>	10 l
	0,25 mol/l – 0,25 N, volumetric standard solution	plastic	<b>P711.1</b>	1 l
		ROTI®CUBE	<b>P711.2</b>	5 l
		ROTI®CUBE	<b>P711.3</b>	10 l
	0,33 mol/l – 0,33 N, volumetric standard solution	plastic	<b>0755.1</b>	1 l
	0,5 mol/l – 0,5 N, volumetric standard solution	plastic	<b>P710.1</b>	1 l
		plastic	<b>P710.2</b>	5 l
		ROTI®CUBE	<b>P710.3</b>	5 l
		ROTI®CUBE	<b>P710.4</b>	10 l
	1 mol/l – 1 N, volumetric standard solution	plastic	<b>K021.1</b>	1 l
		plastic	<b>K021.2</b>	5 l
		ROTI®CUBE	<b>K021.3</b>	5 l
		ROTI®CUBE	<b>K021.4</b>	10 l
	2 mol/l – 2 N, volumetric standard solution	plastic	<b>T135.1</b>	1 l
		ROTI®CUBE	<b>T135.2</b>	5 l
	ROTI®CUBE	<b>T135.3</b>	5 l	
4 mol/l – 4 N, volumetric standard solution	plastic	<b>T198.1</b>	1 l	
5 mol/l – 5 N, volumetric standard solution	plastic	<b>KK71.1</b>	1 l	
6 mol/l – 6 N, volumetric standard solution	plastic	<b>0214.1</b>	1 l	
10 mol/l – 10 N, volumetric standard solution	plastic	<b>1E2N.1</b>	500 ml	

Product name	Purity	Pack.	Art. No.	Pack Qty.
<b>Sulphuric acid</b>	0,01 mol/l – 0,02 N, volumetric standard solution	plastic	<b>X872.1</b>	1 l
		plastic	<b>K026.1</b>	1 l
	0,05 mol/l – 0,1 N, volumetric standard solution	plastic	<b>K026.2</b>	5 l
		ROTI®CUBE	<b>K026.3</b>	5 l
		ROTI®CUBE	<b>K026.4</b>	10 l
	0,1 mol/l – 0,2 N, volumetric standard solution	plastic	<b>K026.7</b>	25 l
		plastic	<b>N072.1</b>	1 l
		plastic	<b>N072.2</b>	5 l
	0,125 mol/l – 0,25 N, volumetric standard solution	plastic	<b>1E2A.1</b>	1 l
	0,25 mol/l – 0,5 N, volumetric standard solution	plastic	<b>P709.1</b>	1 l
		plastic	<b>P709.2</b>	5 l
		ROTI®CUBE	<b>P709.3</b>	10 l
	0,5 mol/l – 1 N, volumetric standard solution	plastic	<b>K027.1</b>	1 l
		plastic	<b>K027.2</b>	5 l
		ROTI®CUBE	<b>K027.3</b>	5 l
		ROTI®CUBE	<b>K027.4</b>	10 l
	1 mol/l – 2 N, volumetric standard solution	plastic	<b>X873.1</b>	1 l
	plastic	<b>X873.2</b>	5 l	
1,5 mol/l – 3 N, volumetric standard solution	plastic	<b>1E29.1</b>	1 l	
2 mol/l – 4 N, volumetric standard solution	plastic	<b>9896.1</b>	500 ml	
	plastic	<b>9896.2</b>	1 l	
2,5 mol/l – 5 N, volumetric standard solution	plastic	<b>KK74.1</b>	1 l	
7,5 mol/l – 15 N, volumetric standard solution	plastic	<b>1E28.1</b>	1 l	

Safety-relevant data and further information in the current catalogue and at [www.carlroth.com](http://www.carlroth.com)

# Acids & Bases Volumetric Standard Solution

## ROTI®Volum, Volumetric Solutions in Ampoules



## Volumetric Standard Solutions, ready-to-use, Reag. Ph.Eur.



ready-to-use

### Advantages:

- Concentrated standard solutions packaged in practical and low-cost ampoules
- Designed for flexible and easy handling, and as a space-saving alternative to ready-to-use custom solutions
- Standard solutions are prepared through dilution to a final volume of exactly one litre.
- Exactly defined molar concentration ( $\pm 0,2\%$ ) according to the preparation
- High accuracy for precise analyses

Product name	Purity	Art. No.	Pack Qty.
Hydrochloric acid	0,1 mol/l – 0,1 N, volumetric standard solution	CN61.1	1 unit(s)
	0,5 mol/l – 0,5 N, volumetric standard solution	CN62.1	1 unit(s)
	1 mol/l – 1 N, volumetric standard solution	CN63.1	1 unit(s)
Oxalic acid solution	0,05 mol/l – 0,1 N	CN59.1	1 unit(s)
Potassium hydroxide solution	0,1 mol/l – 0,1 N	CN53.1	1 unit(s)
Sodium hydroxide solution	0,1 mol/l – 0,1 N	CN56.1	1 unit(s)
	0,5 mol/l – 0,5 N	CN57.1	1 unit(s)
	1 mol/l – 1 N	CN58.1	1 unit(s)
Sulphuric acid	0,05 mol/l – 0,1 N, volumetric standard solution	CN64.1	1 unit(s)
	0,5 mol/l – 1 N, volumetric standard solution	CN65.1	1 unit(s)

Solutions are produced and tested according to chapter 4.2 of the european pharmacopoeia. Traceable to SRM from NIST.

Product name	Purity	Art. No.	Pack Qty.
Hydrochloric acid	0,1 mol/l – 0,1 N, volumetric standard solution, Reag. Ph. Eur.	6789.1	1 l
	1 mol/l – 1 N, volumetric standard solution, Reag. Ph. Eur.	6792.1	1 l
		6792.2	2.5 l
Perchloric acid	0,1 mol/l – 0,1 N, volumetric standard solution, Reag. Ph. Eur., in anhydrous acetic acid	9525.1	1 l
Potassium hydroxide solution	1 mol/l – 1 N, volumetric standard solution, Reag. Ph. Eur.	9522.1	1 l
Sodium hydroxide solution	0,1 mol/l – 0,1 N, volumetric standard solution, Reag. Ph. Eur.	6783.1	1 l
	1 mol/l – 1 N, volumetric standard solution, Reag. Ph. Eur.	6785.1	1 l
Sulphuric acid	0,05 mol/l – 0,1 N, volumetric standard solution, Reag. Ph. Eur.	6793.1	1 l
	0,5 mol/l – 1 N, volumetric standard solution, Reag. Ph. Eur.	6794.1	1 l

# Acids & Bases for Specific Uses

## ROTIPURAN® for the determination of mercury

Product name	Brand/Purity	Pack.	Art. No.	Pack Qty.
Hydrochloric acid	ROTIPURAN® 37 % fuming, p.a., ISO, max. 0,005 ppm Hg	glass	X942.1	1 l
			X942.2	2.5 l
Nitric acid	ROTIPURAN® ≥65 %, p.a., ISO, max. 0,005 ppm Hg	glass	X943.1	1 l
			X943.2	2.5 l
Sulphuric acid	ROTIPURAN® 95–98 %, p.a., ISO, max. 0,005 ppm Hg	glass	X944.1	1 l
			X944.2	2.5 l
		plastic	X944.3	10 l
			X944.4	25 l

## ROTIPURAN® for the determination of nitrogen

Product name	Brand/Purity	Pack.	Art. No.	Pack Qty.
Boric acid	≥99,8 %, p.a., ACS, ISO	plastic	6943.2	250 g
			6943.4	500 g
			6943.1	1 kg
			6943.6	2.5 kg
			6943.3	5 kg
			6943.5	25 kg
Boric acid solution	4 %, p.a.	plastic	HN24.1	1 l
			HN24.4	2.5 l
			HN24.2	5 l
			HN24.3	10 l
Sodium hydroxide	≥98 %, p.a., ISO, in pellets	plastic	6771.3	500 g
			6771.1	1 kg
			6771.4	2.5 kg
			6771.2	5 kg
			6771.6	10 kg
			6771.5	25 kg
Sodium hydroxide solution	ROTIPURAN® ≥32 %, p.a.	plastic	T196.1	1 l
			T196.2	2.5 l
			T196.3	5 l
			T196.7	25 l
Sulphuric acid	ROTIPURAN® 98 %, for nitrogen determination	glass	X945.1	1 l
			X945.2	2.5 l

## ROTIPURAN® for the determination of fat content

Product name	Brand/Purity	Pack.	Art. No.	Pack Qty.
Sulphuric acid	ROTIPURAN® 90–91 %, for fat determination	plastic	X946.1	1 l
			X946.2	2.5 l
			CN89.1	1 l
			CN89.2	2.5 l
	ROTIPURAN® 62 %, p.a., for fat determination in cheese (d 1,52) according to van Gulik	plastic	CN89.3	5 l
			CN89.4	10 l
			CN89.5	25 l

## Determination of viscosity

Product name	Brand/Purity	Pack.	Art. No.	Pack Qty.
Sulphuric acid	96 %, for viscosity determination according to DIN EN ISO 307	glass	4363.5	500 ml
			4363.1	1 l
			4363.2	2.5 l

Safety-relevant data and further information in the current catalogue and at [www.carlroth.com](http://www.carlroth.com)



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