

Volumetric solutions



Titration is a high-precision analytical method that requires titrants of accurately known concentration.

Scharlau's volumetric solutions are manufactured with utmost precision, allowing us to guarantee a factor of 1.000.

Traceability

Scharlau volumetric solutions are analysed using a certified reference material ISO 17034 accredited, measured according to ISO/IEC 17025 and traceable to the International System of Units by means of a Standard Reference Material from NIST (SRM®).

Titre

The titre or factor of a volumetric solution is the ratio between the molar concentration obtained ($M(x)$) and the molar concentration expected ($Me(x)$). $t = M(x) / Me(x)$ Our solutions are manufactured with a titre of 1.000. Because the titre is important for the results of titrations, solution titre should be checked regularly.

Accuracy

To manufacture solutions of accurate concentration, we use modern reactors that allow thorough solution mixing and optimal concentration adjustment to obtain a factor of 1.000.

Expiry date

Ready-to-use volumetric solutions have a shelf life of 3 years, except those with a lower concentration, which have a shelf life of 2 years.

Complete certificate of analysis

Volumetric solutions are used as reference materials to calculate the concentration, and it is important for the certificate of analysis to list all data characterizing the solution.

Our CoA list all the critical data, and always is accompanying the product.

Convenient HPDE Bottle

Our 1 litre bottle can be directly used in the automatic titrator. It fits perfectly into the titrator support and does not move, not even when empty.

In addition, raised titration marks allow the user to accurately estimate the amount of liquid remaining in the bottle.

Tailor-made solutions

We can prepare your solutions. Over 50 years of experience in reagent manufacture are your assurance of quality.

All solutions are precise and reliable for guaranteed quality

	DESCRIPTION	CONCENTRATION	ART No.		DESCRIPTION	CONCENTRATION	ART No.
ACID BASE	Acetic acid	0,1 mol/l (0,1 N)	AC0364	TITRATION	Ethylenediaminetetraacetic acid, EDTA, disodium salt	0,01 mol/l (0,02 N)	AC0971
		1 mol/l (1 N)	AC0365			0,02 mol/l (0,04 N)	AC0973
	Hydrochloric acid	0,01 mol/l (0,01 N)	AC0757			0,025 mol/l (0,05 N)	AC0974
		0,05 mol/l (0,05 N)	AC0754			0,05 mol/l (0,1 N)	AC0972
		0,1 mol/l (0,1 N)	AC0746			0,1 mol/l (0,2 N)	AC0970
		0,2 mol/l (0,2 N)	AC0740		Calcium chloride	1 mol/l	CA0195
		0,25 mol/l (0,25 N)	AC0755			0,05 mol/l	CI0230
		0,31 mol/l (0,31 N)	AC0769			0,1 mol/l	CI0231
		0,5 mol/l (0,5 N)	AC0745			0,02 mol/l	CO0103
		1 mol/l (1 N)	AC0744			0,1 mol/l	CO0102
		1,4 mol/l (1,4 N)	AC0751		Magnesium chloride	0,1 mol/l (0,2 N)	MA0038
		2 mol/l (2 N)	AC0748		Magnesium sulfate	0,01 mol/l	MA0087
	3 mol/l (3 N)	AC0738	Lead(II) nitrate		0,05 mol/l	PL0145	
	5 mol/l (5 N)	AC0749	Oxalic acid		0,005 mol/l (0,01 N)	AC1725	
	6 mol/l (6 N)	AC0752			0,05 mol/l (0,1 N)	AC1723	
	Nitric acid	0,1 mol/l (0,1 N)	AC1611	Amonium iron(III) sulfate, solution	0,1 mol/l (0,1 N)	HI0317	
		0,5 mol/l (0,5 N)	AC1615	Bromide-bromate	0,05 mol/l (0,1 N), according to ASTM D5776-99	BR0070	
		1 mol/l (1 N)	AC1610		0,05 mol/l (0,05 N)	CE0101	
	Ortho-Phosphoric acid	2 mol/l (2 N)	AC1612	Cerium(IV) sulfate	0,1 mol/l (0,1 N)	CE0102	
		1 mol/l	AC1105	Potassium bromate	1/60 mol/l (0,1 N)	PO0165	
	Sulfuric acid	1 mol/l	AC1106	Potassium dichromate	0,04 mol/l, for COD determination	PO0233	
		0,01 mol/l (0,02 N)	AC2083		1/120 mol/l (0,05 N)	PO0218	
		0,025 mol/l (0,05 N)	AC2076		1/24 mol/l (0,25 N)	PO0232	
		0,05 mol/l (0,1 N)	AC2082		1/6 mol/l (1 N)	PO0231	
		0,1 mol/l (0,2 N)	AC2087		1/60 mol/l (0,1N)	PO0230	
		0,125 mol/l (0,25 N)	AC2088	Potassium permanganate	0,02 mol/l (0,1 N)	PO0336	
		0,1275 mol/l (0,255 N)	AC2106		0,2 mol/l (1 N)	PO0335	
		0,13 mol/l (0,26 N)	AC2084	Sodium lauryl sulfate	0,004 mol/l	SO0458	
		0,25 mol/l (0,5 N)	AC2081	Sodium metaarsenite	0,05 mol/l (0,1 N)	SO0100	
		0,5 mol/l (1 N)	AC2080	Sodium nitrate	1 mol/l	SO0505	
		1 mol/l (2 N)	AC2085	Sodium thiosulfate	0,002 mol/l (0,002 N)	SO0734	
		2,5 mol/l (5 N)	AC2086		0,01 mol/l (0,01 N)	SO0733	
		Potassium hydroxide	4 mol/l (8 N), for COD determination, according ISO 6060	AC2075	0,05 mol/l (0,05 N)	SO0737	
			5 mol/l (10 N)	AC2089	0,1 mol/l (0,1 N)	SO0731	
	0,1 mol/l (0,1 N)		PO0282	0,282 mol/l (0,282 N)	SO0732		
	0,23 mol/l (0,23 N), for det. crude fibre, according Weende		PO0283	0,5 mol/l (0,5 N)	SO0729		
	0,5 mol/l (0,5 N)		PO0281	1 mol/l (1 N)	SO0730		
	Sodium carbonate	1 mol/l (1 N)	PO0280	Iodine	0,01 mol/l (0,02 N)	YO0025	
		2 mol/l (2 N)	PO0288		0,02365 mol/l (0,0473 N)	YO0027	
	Sodium hydroxide	0,05 mol/l (0,1 N)	SO0051	0,05 mol/l (0,1 N)	YO0023		
		0,5 mol/l (1 N)	SO0050	0,5 mol/l (1 N)	YO0024		
		Amonium thiocyanate	0,01 mol/l (0,01 N)	SO0439	0,1 mol/l (0,1 N)	AM0420	
			0,02 mol/l (0,02 N)	SO0448	1 mol/l (1 N)	AM0421	
			0,025 mol/l (0,025 N)	SO0447	Hyamine® 1622 (Hyamine® is a trademark of Rohm and Haas company)	0,004 mol/l	HY0001
			0,05 mol/l (0,05 N)	SO0453		Mercury(II) nitrate	0,01 mol/l (0,02 N)
0,1 mol/l (0,1 N)			SO0443	0,01 mol/l (0,01 N)	PL0058		
0,2 mol/l (0,2 N)			SO0445	0,02 mol/l (0,02 N)	PL0056		
0,25 mol/l (0,25 N)			SO0444	0,05 mol/l (0,05 N)	PL0059		
0,313 mol/l (0,313 N)			SO0474	Silver nitrate	0,1 mol/l (0,1 N)	PL0055	
0,3546 mol/l (0,3546 N)			SO0449		1 mol/l (1 N)	PL0057	
0,4 mol/l (0,4 N)			SO0452	Potassium thiocyanate	0,1 mol/l (0,1 N)	PO0375	
0,5 mol/l (0,5 N)		SO0442	Sodio chloride	0,1 mol/l (0,1 N)	SO0229		
1 mol/l (1 N)	SO0441	PACKAGING	500ml				
1,66 mol/l (1,66 N)	SO0430		Bottles	1 liter			
1/4,9 mol/l (1/4,9 N)	SO0464		Jerricans	5 liters			
1/49 mol/l (1/49 N)	SO0465		Kubitainer	10 liters			
1/9 mol/l (1/9 N)	SO0429		NOTE: References may not be available on all packages.				
2 mol/l (2 N)	SO0440						
5 mol/l (5 N)	SO0455						
6 mol/l (6 N)	SO0451						
NON-AQUEOUS MATRIX	Perchloric acid	in acetic acid 0,1 mol/l (0,1 N)	AC1765				
		0,01 mol/l (0,01 N) in 2-propanol	PO0294				
	Potassium hydroxide	0,05 mol/l (0,05 N) in 2-propanol	PO0293				
		0,1 mol/l (0,1 N) in 2-propanol	PO0289				
		0,1 mol/l (0,1 N) in methanol	PO0292				
		0,5 mol/l (0,5 N) in methanol	PO0286				
		ethanolic solution 0,1 mol/l	PO0284				
ethanolic solution 0,5 mol/l	PO0278						
Tetrabutylamonio hidróxido	0,1 mol/l in 2-propanol/methanol	TE0116					

Find more information here:

