



Titration goes digital

Connect Directly to Your Titrator with SmartChemicals

A new titration technology, using Supelco® SmartTitrants & Supelco® SmartStandards transfers data seamlessly to the titrator. Just a brief touch on the reagent bottles saves time, reduces errors and always ensures maximum data integrity.

Safe data transfer via RFID technology

By copying data from certificates of analysis is slow and creates chances for errors.

SmartChemicals eliminate time consuming steps and human errors by transferring all data wirelessly and instantly to the titrator software. Volumetric solutions, Karl Fischer titrants and all standards are embedded with an RFID (Radio Frequency Identification) tag. All relevant data from the Certificate of Analysis are stored on the RFID tag of the SmartChemical.

Just a simple touch transfers all data in seconds

All information needed for method execution, result calculation and documentation as product name, article number, lot/batch no, concentration/assay, shelf life/expiry date are seamlessly transferred to the instrument. For standards additional data as molecular weight, supplier, uncertainty and compliance according to Pharmacopeias and ISO Guide 34 are also transmitted.

Previously opened chemicals are also recognized, the initial opening date is stored on the RFID tag and is shown on the touchscreen. Expired chemicals are automatically locked from use.

Benefits using SmartChemicals

- **Secure data transfer** – ensures complete and correct reagent & standard data in the titration software
- **Ease of use** – intuitive operation and convenient data transfer in one touch
- **Extended quality management** – titer determination, shelf life, compliance data, initial opening date
- **Improved efficiency** – fast data transfer and timesaving with no manual writing and no four-eyes principle necessary

Supelco® SmartChemicals - Product List

Cat. No.	Description	Pack size/Qty	Packaging
Titripur® Volumetric Solutions			
1003261003	Titripur® Hydrochloric acid solution in 2-propanol 0.1 mol (0.1 N)	1 L	Glass bottle
1131349013	Titripur® Hydrochloric acid solution 3.571 mol (1/0.28N)	10 L	Titripac
1090601003	Titripur® Hydrochloric acid solution 0.1 mol (0.1 N)	1 L	PE bottle
1090609013	Titripur® Hydrochloric acid solution 0.1 mol (0.1 N)	10 L	Titripac
1090604003	Titripur® Hydrochloric acid solution 0.1 mol (0.1 N)	4 L	Titripac
1090581003	Titripur® Hydrochloric acid solution 0.5 mol (0.5 N)	1 L	PE bottle
1090574003	Titripur® Hydrochloric acid solution 1.0 mol (1.0 N)	4 L	Titripac
1055441003	Titripur® Potassium hydroxide solution 0.1 mol (0.1 N)	1 L	PE bottle
1084311003	Titripur® Titriplex III Solution 0.1 mol	1 L	PE bottle
1084314003	Titripur® Titriplex III Solution 0.1 mol	4 L	Titripac
1084319013	Titripur® Titriplex III Solution 0.1 mol	10 L	Titripac
1090749013	Titripur® Sulfuric acid solution 0.05 mol	10 L	Titripac
1090721003	Titripur® Sulfuric acid solution 0.5 mol (1 N)	1 L	PE bottle
1090724003	Titripur® Sulfuric acid solution 0.5 mol	4 L	Titripac
1090729013	Titripur® Sulfuric acid solution 0.5 mol	10 L	Titripac
4803641003	Titripur® Sulfuric acid solution 2.5 mol (5N)	1 L	PE bottle
1090811003	Titripur® Silver nitrate solution 0.1 mol	1 L	PE bottle
1117181003	Titripur® Silver nitrate solution 0.05 mol	1 L	PE bottle
1090991003	Titripur® Iodine solution 0.05 mol	1 L	Glass bottle
1091141003	Titripur® Potassium hydroxide solution in ethanol 0.5 mol (0.5 N)	1 L	Glass bottle
1091151003	Titripur® Potassium hydroxide solution in ethanol 0.1 mol (0.1 N)	1 L	Glass bottle
1091361003	Titripur® Sodium hydroxide solution 2 mol (2 N)	1 L	PE bottle
1091371003	Titripur® Sodium hydroxide solution 1 mol (1 N)	1 L	PE bottle
1091374003	Titripur® Sodium hydroxide solution 1 mol	4 L	Titripac
1091379013	Titripur® Sodium hydroxide solution 1 mol	10 L	Titripac
1091381003	Titripur® Sodium hydroxide solution 0.5 mol (0.5 N)	1 L	PE bottle
1091384003	Titripur® Sodium hydroxide solution 0.5 mol (0.5 N)	4 L	Titripac
1091389013	Titripur® Sodium hydroxide solution 0.5 mol (0.5 N)	10 L	Titripac
1091391003	Titripur® Sodium hydroxide solution 0.25 mol	1 L	PE bottle
1091399013	Titripur® Sodium hydroxide solution 0.25 mol	10 L	Titripac
1091411003	Titripur® Sodium hydroxide solution 0.1 mol	1 L	PE bottle
1091419013	Titripur® Sodium hydroxide solution 0.1 mol	10 L	Titripac
1091414003	Titripur® Sodium hydroxide solution 0.1 mol	4 L	Titripac
1091471003	Titripur® Sodium thiosulfate solution 0.1 mol	1 L	PE bottle
1091474003	Titripur® Sodium thiosulfate solution 0.1 mol	4 L	Titripac
1091479013	Titripur® Sodium thiosulfate solution 0.1 mol	10 L	Titripac
1091641003	Titripur® Hanus solution 0.1 mol for determination of iodine number	1 L	Glass bottle
1093511003	Titripur® Potassium hydroxide solution in methanol 1 mol	1 L	Glass bottle
1091081003	Titripur® Potassium hydroxide solution 1 mol	1 L	PE bottle
1091621003	Titripur® Tetra-n-butyl-ammonium hydroxide solution	1 L	Glass bottle
1090791003	Titripur® Ammonium thiocyanate solution 0.1 mol	1 L	PE bottle
1091181003	Titripur® Potassium dichromate solution 1/24 mol (0.25 N)	1 L	Glass bottle
1090921003	Titripur® Cer (IV) sulfate solution 0.1 mol (0.1 N)	1 L	PE bottle
1027841003	Titripur® Cooper sulfate solution 0.1 mol (0.1 N)	1 L	PE bottle
1090651003	Titripur® Perchloric acid solution in water free acetic acid 0.1 mol (0.1 N)	1 L	Glass bottle

Cat. No.	Description	Pack size/Qty	Packaging
Certipur® Certified Volumetric Standards according to ISO 17034			
1024000083	Certipur® Potassium hydrogen phthalate CRM	80 g	Glass bottle
1024010063	Certipur® Benzoic acid CRM	60 g	Glass bottle
1024020083	Certipur® Iron(II) ethylenediammonium sulfate CRM	80 g	Glass bottle
1024030083	Certipur® Potassium dichromate CRM	80 g	Glass bottle
1024080083	Certipur® TRIS(Hydroxymethyl)aminomethane CRM	80 g	Glass bottle
1024090103	Certipur® Zinc CRM	100 g	Glass bottle
1024040103	Certipur® Potassium iodate CRM	100 g	Glass bottle
1024050083	Certipur® Sodium carbonate CRM	80 g	Glass bottle
1024070063	Certipur® Di-Sodium oxalate CRM	60 g	Glass bottle
1024100053	Certipur® Calcium carbonate CRM	50 g	Glass bottle
Aquastar® Karl Fischer Titrants according to ISO 17034			
1880011003	Aquastar® CombiTitrant 1 one component reagents 1 mg H ₂ O/ml	1 L	Glass bottle
1880021003	Aquastar® CombiTitrant 2 one component reagents 2 mg H ₂ O/ml	1 L	Glass bottle
1880051003	Aquastar® CombiTitrant 5 one component reagents 5 mg H ₂ O/ml	1 L	Glass bottle
1880061003	Aquastar® CombiTitrant 5 Keto one component reagents 5 mg H ₂ O/ml	1 L	Glass bottle
1880101003	Aquastar® Titrant 5 two component reagents 5 mg H ₂ O/ml	1 L	Glass bottle
Aquastar Certified Water Standards according to ISO 17034			
1880510013	Aquastar® Water standard 0.1 % CRM	10 x 8 ml	Ampoules
1880520013	Aquastar® Water standard 1 % CRM	10 x 8 ml	Ampoules
1880550013	Aquastar® Oil standard CRM (15 to 30 ppm water)	10 x 8 ml	Ampoules

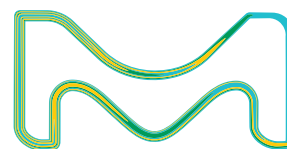
Note: more products will follow in 2020 (16 Jan. 2020)



The life science business of Merck operates as MilliporeSigma in the U.S. and Canada.

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Ver. 1.0 2019 - 25556 03/2020



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