



## 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

## Product List

Description	Cat. No.
<b>Titripur® Volumetric Solutions</b>	
Perchloric acid in acetic acid 0.1 mol/L	1090651003
Potassium hydroxide solution in ethanol 0.5 mol/L	1091141003
Potassium hydroxide solution in ethanol 0.1 mol/L	1091151003
Hydrochloric acid solution 0.1 mol/L	1090601003
Sodium hydroxide solution 0.1 mol /L	1091411003
Sodium thiosulfate solution 0.1 mol/L	1091471003
Sodium hydroxide solution 1 mol/L	1091371003
<b>Certipur® Volumetric Standards (CRM´s)</b>	
Potassium hydrogen phthalate - Certified Reference Material	1024000083
Benzoic acid - Certified Reference Material	1024010063
TRIS(hydroxymethyl) aminomethane - Certified Reference Material	1024080083
Zinc- Certified Reference Material	1024090103
<b>Aquastar® Karl Fischer Titrants</b>	
CombiTitrant 5, Karl Fischer® one component reagents 5 mg H <sub>2</sub> O/mL	1880051003
Titrant 5, Karl Fischer® two component reagents 5 mg H <sub>2</sub> O/mL	1880101043
<b>Aquastar® Water Standards (CRM´s)</b>	
Water Standard 1% in ampoules - Certified Reference Material	1880520313



## More products are available on [SigmaAldrich.com/SmartChemicals](https://www.sigmaaldrich.com/SmartChemicals)

### SmartChemicals are compatible with Mettler Toledo Titrators

G20S Compact Titrator

G10S Compact Titrator

V30S Compact Titrator

V20S Compact Titrator

V10S Compact Titrator

T9 Excellence Titrator

T7 Excellence Titrator

T5 Excellence Titrator

External SmartChemical Redaer

SmartChemicals – the future of titration

[SigmaAldrich.com/SmartChemicals](https://www.sigmaaldrich.com/SmartChemicals)

## To place an order or receive technical assistance

Order/Customer Service: [SigmaAldrich.com/order](https://www.sigmaaldrich.com/order)

Technical Service: [SigmaAldrich.com/techservice](https://www.sigmaaldrich.com/techservice)

Safety-related Information: [SigmaAldrich.com/safetycenter](https://www.sigmaaldrich.com/safetycenter)

[SigmaAldrich.com](https://www.sigmaaldrich.com)

MilliporeSigma  
400 Summit Drive  
Burlington, MA 01803

© 2020 Merck KGaA, Darmstadt, Germany and/or its affiliates. All Rights Reserved. MilliporeSigma, the vibrant M, Supelco, Titripur, Certipur and Aquastar are trademarks of Merck KGaA, Darmstadt, Germany or its affiliates. All other trademarks are the property of their respective owners. Detailed information on trademarks is available via publicly accessible resources.

