

## DATA TRANSFER ASSURED with Supelco® Digital Solutions

Connect your lab to ensure data integrity

In the fast-paced world of routine lab testing, increasing pressure is placed on chemists and technicians to analyze more samples in shorter timeframes, and often with fewer personnel. Analytical processes and methods therefore need to be streamlined to improve efficiency.

Easy, secure and reliable transfer of the data required for method execution and documentation is becoming more important, and in addition helps prevent human errors. Digitalization and connectivity are the key phrases often used to describe the demand for fast and seamless access to the required data, and the transfer of data should be simple and smart.

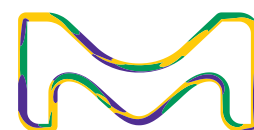
At Merck, we are addressing these challenges in multiple ways.

We implemented a 2D matrix barcode for our chemicals and reagents, allowing users to scan a barcode to retrieve product data from the Certificate of Analysis along with up-to-date product safety information from the SDS, using a smart phone app or a barcode reader, for example. For more details, visit [SigmaAldrich.com/2DBarcode](http://SigmaAldrich.com/2DBarcode)

Chemicals with smart labels take us a step further to streamlining the analytical process in the lab by transferring reagent and reference standard data directly to your analytical instrument.

For more information, visit:

[SigmaAldrich.com/connected](http://SigmaAldrich.com/connected)



We have introduced titration reagents and reference materials with an RFID tag that carries all the data needed to perform your analyses, such as product/catalog number, lot/batch number, concentration and shelf life. The tag is readable via an RFID reader on the instrument and the data is transferred wirelessly to the instrument's software. Truly "Titration Goes Digital". This new technology prevents transcription errors for more efficient, faster and reliable analytical results and records.

In 2018, we introduced our "3S" reagents for volumetric titration (Safe, Smart, Secure) with a special cap containing an RFID chip for data transfer to the METROHM Omnis titration systems ([SigmaAldrich.com/3S](https://sigmaaldrich.com/3S)).

Last year we released a new line of "SmartChemicals" encompassing reagents and reference materials for METTLER TOLEDO titrators with an RFID tag on the label ([SigmaAldrich.com/SmartChemicals](https://sigmaaldrich.com/SmartChemicals)).

The Supelco® portfolio contribution to solving customer problems includes traceable and efficient transfer of chemical analyses from water and food/beverage testing using our **Spectroquant® photometric analysis** ([SigmaAldrich.com/prove](https://sigmaaldrich.com/prove)) and MQuant® Test strip solutions.

Data is acquired through precision instrumentation for your quantitative spectrometric analyses with Spectroquant® PROVE or MOVE photometers. Automate and streamline the transfer of your routine quality control or experimental data from your Spectroquant® Prove spectrophotometer to your electronic lab system (LIMS, ELN) with our Spectroquant® Prove Connect to LIMS software. No matter where you need your data—the Spectroquant® Move Data Transfer Unit allows you to transfer, print & store all your measurements.

The **MQuant® StripScan app** ([SigmaAldrich.com/mquant-stripscan](https://sigmaaldrich.com/mquant-stripscan)) provides a unique innovative approach: it takes the measurement from visual to digital analysis by using a smartphone as an analytical tool. Providing unprecedented simple and affordable access to instrumental analysis, it combines the safety and affordability of test strips with the advantages of instrumental readout. With the MQuant® StripScan app you obtain digital measurement with higher precision, reproducibility, easy data storage, data visualization along with automatic reporting and sharing options. Transfer into other digital documentation systems like ELN without transmission errors or data tempering becomes effortless.

For more information, visit:

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

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Sample smarter with Supelco® SPME fibers. The full range of Supelco® SPME fibers are now available for use with your PAL autosampler system. **Supelco® PAL Smart SPME fibers** ([SigmaAldrich.com/smartSPME](https://sigmaaldrich.com/smartSPME)) combine our SPME coating expertise and innovations, including our Carboxen® dual-coated and overcoated fibers, with Smart technology for seamless sample preparation. The entire portfolio of our traditional Supelco® SPME fibers is now available in the Smart SPME format for accurate, precise and consistent results. We continue to lead the market in the development of innovative SPME coatings designed to solve your analytical challenges.

Lastly, you can experience the new **Proficiency Testing Portal** ([SigmaAldrich.com/proficiencytesting](https://sigmaaldrich.com/proficiencytesting)).

The most common use for proficiency testing is to demonstrate to a regulatory body or an accreditation body that a laboratory is capable and competent to perform a specific analytical test or method. A second, and sometimes overlooked, benefit of proficiency testing is a critical tool for quality assurance and continuous improvement. Proficiency testing performed over time can give a laboratory a true picture of their testing quality, it can help a laboratory identify and realize continual improvement opportunities and can help a laboratory avoid nonconforming tests. We manufacture tests and distribute proficiency testing samples. We will also supply any necessary information required to complete the test. Once the participant has supplied the analytical result, the provider will evaluate the data using criteria contained in ISO 17043:2010 and issue a report to each participant. We offer user-friendly data entry graphical reports. Track and analyze the results using "MyStats" and experience over 20 new and improved features to enhance your data handling experience. We provide you with the essential performance data and premium grade testing components that help you build a valuable quality control asset.

## Ensuring trust and confidence through accurate results

The latest digital solutions from the Supelco® portfolio can simplify your daily analytical workflow while maintaining the fidelity of your data. We will continue to extend these product lines to make your daily analytical work safer, easier and more efficient, as well as providing support to ensure you achieve the most accurate results.

