

Merck Millipore for the laboratory

lab mail

1. Vol. 12

100 %

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Certified certainty

Certipur® buffers for pH measurement are accredited to DIN EN ISO 17025

As every lab knows, repeat analyses cost time and money. So for accurate, precise pH measurements the first time around, it makes sense to use the most sophisticated tools available: Merck Certipur®.

All Certipur® buffers are now accredited to DIN EN ISO 17025 in our own accredited calibration lab, which means you can have complete confidence in your analytical results. Strict production controls ensure high batch-to-batch consistency, and each product comes with a comprehensive Certificate of Analysis that documents batch-specific parameters.

To help streamline your audits, Certipur® buffers also include full documentation of traceability to globally accepted primary reference materials from NIST and PTB. Audit-relevant data include the analytical method used, date of release, and minimum shelf life, as well as uncertainty statistics, batch-specific values, and the responsible laboratory head.

From secondary standard reference buffer solutions and substances to a broad variety of certified, ready-to-use buffer solutions, our Certipur® buffers range ensures reliable, reproducible results every time.

For details, visit www.merck-chemicals.com/certipur

Certipur® reference buffer solutions and substances are accredited to ISO 17025.



100 %

Fascinated by analytics

Who aims for nearly perfect, almost reliable or possibly safe? Certainly not you. Because analytics is about 100% fascination – anything less is unacceptable. We understand. And deliver. Whether creating innovative, premium quality products or fulfilling regulatory requirements, we always strive for excellence. It's this passion for perfection that keeps our customers and us at the forefront of our fields.

For more information about our "100% Fascinated by analytics" campaign please visit: www.merckmillipore.com/fascinated-by-analytics



*Putting analytics first:
with high-quality products and excellent service.*

Accuracy assured

Apura® water standards for precise Karl Fischer titration

Quality assurance is an important part of Karl Fischer titration tasks. After all, the only way to ensure transparent, comparable analytical results is by choosing reliable reference materials – for example, our Apura® standards. To ensure the highest quality, we manu-

Quality products for precise results: Apura® water standards.

facture them to the strictest standards possible, and monitor those standards precisely with validated procedures.

You can use Apura® standards to monitor Karl Fischer equipment or perform titer determinations of volumetric Karl Fischer reagents, and also to check and evaluate the accuracy of your measuring results. The range includes water standards in ampoules for titer determination, a special standard for the Karl Fischer oven method, and customer testing oil samples.

For details, visit www.merck-chemicals.com/standards-for-karl-fischer-titration

Cleaner cleaning

Our three new premium Extran® cleaning agents

In keeping with our strong commitment to sustainable protection, we have now developed eco-friendlier alternatives for three liquid cleaning agents in our proven high-quality Extran® range. Designed specially to protect your health and the environment, the new products contain no NTA (nitrilotriacetic acid) which is subject to labeling as carcinogenic, and are free of scents, dyestuffs, chlorine, and other toxic ingredients. All the active ingredients are now biodegradable.

Extran® MA05 is a liquid, alkaline manual all-purpose cleaning agent for the removal of heavy contamination. It ensures perfect results even with very hard water, and is especially recommended for cleaning apparatus used in microphosphate testing. Extran® AP05 is the sustainable alternative to Extran® MA03.

Extran® AP16 is a mild alkaline, liquid main cleaning agent designed for automatic dosage in washing machines. It is particularly suited for the gentle cleaning of alkali-sensitive items. It will not foam even during heavy agitation, and is ideal for objects that must never be tainted with allergenic detergents, such as jewelry or glasses. Extran® AP16 is the sustainable alternative to Extran® AP14.

Extran® AP17 is a liquid, alkaline universal cleaning agent that cleans even strongly contaminated items thoroughly and reliably. Designed for the main wash cycle of washing machines, it will not foam even during heavy agitation of the rinse solution, and is particularly suitable for removing starch and protein residues. Extran® AP17 is the sustainable alternative to Extran® AP15.

Depending on the type of contamination and the material to be cleaned, the Extran® range of products offers the perfect solution for the cleaning of your laboratory utensils.

For full details of the new Extran® range, visit www.merck-chemicals.com/extran



Same premium quality, but NTA-free: our new Extran® cleaning agents.

Protecting a unique resource

Spectroquant® tests for fast, reliable, eco-friendly drinking water analyses

Drinking water is essential to life – and unlike other products, there is no substitute available. That's why everyone who produces, uses, or processes it must comply with rigorous quality standards and national regulations. And why the 1998 EU Directive defines such strict quality criteria for alternative testing methods.

Merck Spectroquant® cell and reagent test kits comply with this directive's requirements in full. They are ideal for analyzing a wide range of parameters, and particularly suitable for especially eco-friendly processes: around 80% of Spectroquant® methods use chemicals that comply with national and international standards, and many test kits contain chemicals that are less toxic than comparable test kits from other suppliers.

So simply by using Spectroquant®, you can make a big contribution to workplace safety and environmental protection.

For details of potential applications in reporting or screening, visit www.merck-chemicals.com/spectroquant

Spectroquant® tests – for safer, eco-friendlier drinking water analyses.



Deleting dilution

Certified standard solutions for photometric quality control

With the introduction of certified, diluted standard solutions, Merck now offers a complete photometric system from a single source. Available in different concentrations, the new products make it easier than ever to verify test results accurately without the need for time-consuming, error-prone dilution.

Our new ready-to-use standard solutions are suitable for both standard methods and rapid tests such as Merck Spectroquant® or third-party kits. The range covers all the most significant parameters for water and wastewater analysis. They include ammonium, chemical oxygen demand (COD), nitrate, nitrite, total phosphorus, total nitrogen, and sulfate.

Thanks to the comprehensive analysis certificates, users can rest assured that our diluted, certified standard solutions are directly traceable to primary standard reference materials from NIST. And since all product certificates are available online 24/7, full details of exact concentrations, expanded measurement uncertainty, and other batch-specific and analysis-relevant data are never more than a mouse click away.

For more information, visit www.merck-chemicals.com/crm-standard

Our ready-to-use standard solutions for photometric applications are traceable to SRM from NIST.



Raising the bar in HPLC

Our new Chromolith® HighResolution columns for peak symmetry



If you thought Chromolith® C18 HPLC columns were impressive, just wait till you try the new high-res version! The new HighResolution columns combine excellent peak symmetry with at least 50% more efficiency than a standard Chromolith® column – yet still outperform particulate-filled columns in terms of back pressure and longevity.

At a 1 ml/min flow rate, a chromatogram run on a Chromolith® HighResolution column looks almost identical to the same chromatogram run on a particulate column packed with <math>< 3\mu\text{m}</math> particles. In fact, our new high-resolution columns even produce similar results to columns packed with 2.6 μm ID core-shell particles – yet last 30% longer, and produce less than half the back pressure. You can even couple two columns for even more performance.

Of course, that doesn't mean our standard Chromolith® endcapped columns are out of date. They are still the fastest C18 columns in the world – and still the best choice for longevity with matrix-rich samples. Thanks to their outstandingly low back pressure, you can couple multiple columns as needed too. The choice is yours!

For full details of our new Chromolith® range, visit www.merck-chemicals.com/chromolith-highresolution

Chromolith® HighResolution columns – for outstanding peak symmetry and efficiency.

Why use monolithic HPLC columns?

When you need to analyze relatively 'dirty' samples quickly and robustly, monolithic silica-based columns are an efficient alternative to particle-packed columns. The silica skeleton is highly permeable and porous, so back pressures are much lower.

This permits more flexible flow rates and higher throughput analysis – without compromising separation efficiency or peak capacity. And since their selectivity compares to conventional endcapped columns, you can use standard methods when developing a new protocol.

Growing all the time

Our online Analytical Application Finder

Need to know the right solution for a specific analysis task in HPLC? The Analytical Application Finder (AAF) on the Merck Chemicals website gives you the answer in seconds. From microbiology or Karl Fischer titration to photometry and reflectometry, this dynamic tool already covers more than 2,000 applications – and it's growing all the time.

Our application laboratories add fresh data every day, so the AAF gets more comprehensive every time you look for a new application.

Just visit us on www.merck-chemicals.com/aaf

Still can't find an application note you require? Then contact our experts directly in the AAF and they will do their best to supply exactly what you need.



With the AAF, the right solutions and products are just a mouse click away.

Quality plus convenience

Heipha/Hycon now available from Merck Millipore

Merck Millipore now has a full range of ready-to-use BioMonitoring culture media and tools too.

Does your lab work involve industrial microbiology for contamination detection? If so, you'll be pleased to hear that we have expanded our portfolio in the critical growth area of ready-to-use media. We have also added particle counting to and strengthened air monitoring in our hygiene monitoring portfolio. As a result, you can now order all your BioMonitoring requirements from a single, integrated source: Merck Millipore.

On our route to becoming the top player in the industrial microbiology market, the recent acquisition of Heipha/Hycon, the industrial microbiology business

of Germany-based Biotest AG, fits in perfectly with our own BioMonitoring vision and activities, enabling customers to benefit from complementary portfolios, research and development and state-of-the-art production capabilities.

Both successful Biotest product ranges – Heipha and Hycon – can now be ordered directly from your Merck Millipore partner, or online from our website.

For details of these top-quality, ready-to-use products, please visit www.merckmillipore.com/heipha-hycon-integration

Fast, flexible and reliable

Merck Millipore Organics & Peptides in a nutshell

With over 6,000 organo-chemical specialty reagents, Merck Millipore Organics & Peptides accounts for nearly half the products in the entire Merck catalog. Operated by Merck Schuchardt OHG in Hohenbrunn (Germany), the division supplies a vast range of top-quality building blocks, reagents, catalysts, solvents, and solutions for organic synthesis, and also modified amino acids for peptide synthesis (Novabiochem®). Most of our global customers work in pharma, chemicals, cosmetics, or technical, but we also supply the metal and mining industry in R&D, Upscale & Production.

Since no two customers have the same needs and applications, we supply every product in both catalog and custom sizes, and can even add customer-specific analysis parameters on request. And in the unlikely event that our standard portfolio doesn't include the exact product you need, we can usually make one to order – thanks to our internal, on-site sourcing and QA capabilities.

Our new 'Pharma synthesis non-GMP' product line means we now offer expert support for non-GMP API production applications too.

Like the rest of our portfolio, this dynamic product line is growing all the time – please see www.merck-chemicals.com/organic-synthesis-for-pharmaproduction for details.

Tailor-made service for all your organic and peptide synthesis requirements.

Show it with silver

New reticulin silver plating kit acc. to Gordon and Sweet

You can't always visualize reticular fibers adequately with a hematoxylin and eosin (H&E) stain. Luckily, however, the fibers are argentophil (i.e., have a high affinity to silver), so reticulin silver staining according to Gordon and Sweet makes an ideal alternative.

Our new reticulin kit acc. to Gordon and Sweet contains eight reagents, each in a 30-ml dropper bottle, and has a capacity of up to 110 slides. Using a highly efficient method based on reagent consumption, it stains reticular fibers deep black when used as described in the protocol provided. The new kit is an IVD product, and bears the CE mark.

For details, visit www.merck-chemicals.com/microscopy

For clear, reliable visualization of reticular fibers.



Perfection in every dimension

The new Inorganic Reagents catalog from Merck Millipore



Our new Inorganic Reagents publication is not so much a catalog as a standard reference work for wet chemical and instrumental labs. On more than 300 pages, it provides full details of over 1,000 products – and much more besides. From quality management and quality grades to packaging, media and safety and environmental issues, this is your definitive one-stop source for information and expertise.

The catalog also guides you through the special services we offer on our website – for example, the analytical application finder, the periodic table of elements app, the concentration density finder and the pH indicator finder.

For a closer look at the catalog, visit www.merck-chemicals.com/inorganic-reagents

*Your one-stop guide to perfection
in every dimension.*

Upcoming events

March 11–15	Pittcon	Suntec City, Singapore
March 25–29	ACS Spring	San Diego, USA
April 17–20	Analytica	Munich, Germany
May 7–11	IFAT ENTSORGA	Munich, Germany
June 18–22	Achema	Frankfurt am Main, Germany
November 13–15	Brau	Nuremberg, Germany

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