

Merck for the laboratory

# lab mail

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Lightweight HDPE bottles

New Spectroquant® test kits

More SupraSolv® solvents

Customer Care Services

Microscopy

## Nurturing nature

Merck and UNESCO: Making a difference



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# Tradition meets innovation

## Supporting a UNESCO biosphere reserve – one Titripac® at a time



**KRUGER TO CANYONS**  
BIOSPHERE REGION

Merck has a global commitment to safety and the environment, so we're always looking for new ways to make a difference. And while much of our work consists of reducing or eliminating toxic materials and improving documentation, sometimes it's important to step out of the lab for a while to consider the bigger picture, too. That's why as of April, Merck is supporting the "Kruger to Canyons" UNESCO Biosphere Reserve project in South Africa.

The overall aim of the biosphere reserve is to safeguard the inhabitants' environment by involving them in balanced models of economic growth. "Our specific project involves helping traditional healers to regenerate over-farmed pastures by farming medicinal herbs and plants sustainably," explains Dr. Andreas Rauh, Vice President at Merck. "It's an inspiring example of what can be achieved when local people and international companies work together – and our customers can help."

How? From April to December 2010, Merck donates 50 cents to the UNESCO Biosphere Reserve project for every Titripac® you order. So next time you need top-quality volumetric or buffer solutions for your analysis work, watch out for the K2C logo.

For more information visit  
[www.merck-chemicals.com/unesco-biosphere-reserve](http://www.merck-chemicals.com/unesco-biosphere-reserve)





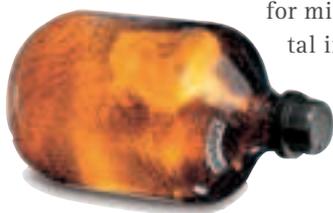
# Our low- to no-tox specialists

## Merck products for wet chemical labs

Merck products for wet chemical labs come in different shapes and sizes, yet they all have one thing in common: In addition to being convenient and highly effective, they are as safe and environment-friendly as possible.

Since prevention is better than cure, most of our high-performance drying agents for gases, liquids, and solids contain no toxic compounds at all.

And while our Extran® cleaning agents do the job thoroughly – and wash off easily with no residues – they are also biodegradable for minimal environmental impact.



As for acids, our Safebreak® bottles eliminate two risks at once. Since they cannot break if you drop or knock them, hazardous acid splashes or cuts from broken glass are a thing of the past. And even if aggressive or other unpleasant liquids spill, our Chemizorb® products absorb them swiftly and safely without disrupting your workflow.

Speaking of efficiency, Merck salts are another simple way to streamline your daily work: designed for better flowability, they ensure easy handling and more reliable results. For full details of Merck wet chemical lab products, visit [www.merck-chemicals.com/wet-chemical-lab](http://www.merck-chemicals.com/wet-chemical-lab)

*Safer, smoother workflows  
for wet chemical labs.*



# Weighing up the benefits

## Lightweight HDPE bottles for solvents and acids

Merck HDPE bottles provide laboratories with the safety they need – without the weight they don't. Developed and offered exclusively by Merck, these high-density polyethylene bottles for solvents and acids ensure highest standards of analytical purity. They also combine important benefits in three key areas – safety, cost effectiveness, and environmental protection.

*Merck HDPE bottles help you work safely with solvents and acids.*

At just 140g for a 2.5l bottle, Merck's popular HDPE bottles are almost nine times lighter than glass, yet provide superior levels of safety. The reason is simple: unlike glass, HDPE cannot break when accidentally knocked or dropped on a hard surface. The special design of the base ensures high pressure stability, while the ergonomic design makes HDPE bottles extremely easy to empty. With no polystyrene outer packaging to worry about, disposals are convenient and eco-friendly, too.

Now Merck has extended the range of HDPE-bottled solvents for analysis by adding five new products – three in EMSURE® quality (Cyclohexane, Toluene and Xylene) and two in EMPARTA® quality (n-Hexane and Toluene). For details and order numbers, visit [www.merck-chemicals.com/solvents](http://www.merck-chemicals.com/solvents)

# Safe, safer, Spectroquant®

Convenient photometric system for drinking water analysis

*The safe, eco-friendly way  
to analyze drinking water.*

Looking for a safe, environment-friendly way to analyze chemical parameters in drinking water? Our convenient Spectroquant® photometric system offers very high levels of protection all round. We do everything we can to reduce the amounts of hazardous or toxic chemicals the test kits contain; in some cases, we've eliminated them completely. The 2,6-Dimethylphenol method of our Nitrate Test is cadmium-free and non-carcinogenic; our Lead Test contains no chloroform; and our Anionic Surfactants Test uses pre-sealed, benzene-free extraction to avoid direct exposure to chemicals. As for advice on test kit waste disposal, Merck's comprehensive global service is second-to-none.

Our free, regularly updated Material Safety Data Sheets (MSDS) provide vital online information on ingredients, technical handling of chemicals, workplace safety measures and ecological data – topics on which other suppliers offer few or no details. To minimize the risk of inhaling toxic substances while you work, we also offer granulated media (DCM) for the microbiological analysis of drinking water.

For full details of our complete range of products for drinking water analysis, please visit [www.merck4food.com/safe-drinking-water](http://www.merck4food.com/safe-drinking-water)



## Rust never sleeps

New Spectroquant® test kits for boiler and cooling water

*Fast, easy measurement  
of corrosion inhibitor levels.*

What do power plants, chemical companies, and food and beverage manufacturers have in common? They all use corrosion inhibitors in their boiler and cooling water systems – and they all need to analyze the concentrations of those inhibitors regularly. To help them do so, Merck has now added two new products to its popular Spectroquant® range: the Molybdenum Test Kit, and the Oxygen Scavenger Test Kit.

The Molybdenum Test Kit measures the different citation units of molybdenum easily, yet precisely. The Oxygen Scavenger Test Kit lets you measure five different corrosion inhibitors with a single kit: N,N-Diethylhydroxy-

lamine, Carbohydrazide, Hydroquinone, Isoascorbic Acid (Erythorbic Acid), and Methyleneketoxime (2-Butanone-oxime). Both kits can be used with Hach instruments without the need for further device-specific calibration.

Like all Spectroquant® test kits, our two latest additions use barcode identification to eliminate human error, and provide 100% reliability and certified safety according to ISO 9001 and ISO 14001 and ISO 17025 standards.

For full details, visit [www.merck-chemicals.com/boiler-and-cooling-water](http://www.merck-chemicals.com/boiler-and-cooling-water)

# The end of uncertainty

## Two new SupraSolv® solvents for headspace gas chromatography

Does your work include using headspace gas chromatography to analyze residual solvents in actives, excipients, and drug products according to ICH, Ph Eur, and USP? If so, you'll know from experience how hard it is to find a solvent quality that doesn't interfere with your analysis because it contains undefined levels of residual solvents, too.

So in response to customer needs, Merck has now introduced two new products that solve the problem at a stroke: N,N-dimethylformamide and Dimethyl Sulfoxide for headspace gas chromatography SupraSolv®. Both were specifically designed in close cooperation with an experienced headspace laboratory for the analysis of residual solvents according to ICH, Ph Eur, and USP. By specifying the concentrations of the various

*Outstanding solvent purity for headspace gas chromatography.*

residual solvents of the three defined classes in the ICH guideline CPMP/ICH/283/95, they help you to achieve reliable, safe, and accurate results every time. Problem solved.

For details, visit [www.merck-chemicals.com/headspace-suprasolv](http://www.merck-chemicals.com/headspace-suprasolv)

# As easy as breathing

## New communication and calibration software for our MAS-100 NT®

Our new MAS-100 NT® high-precision air samplers may be better than ever, but that doesn't mean we're satisfied. To help you get the best possible results, we've now developed a new communication and calibration software program (C&C) that comes free of charge with every device. Users can now select three different access levels to set, read, and program individual parameters, and there's a new alarm/sample log file that lets you store 100 events of each type, then either send them to a printer you connect to the MAS-100 NT®, or export them to an Excel file.

Using the USB connection, you can now transfer up to 100 test results from ten different users to your PC automatically; stored data can be accessed or supplemented at any time. To prevent errors, only one colony count is possible per field – and once you save data as a protocol, user entry fields are blocked to prevent the risk of data manipulation. The software also includes automatic calculation according to FELLER correction tables. Again, you can either output these data to an attached printer, or export them in \*.csv file format.

For details of the new MAS-100 NT®, visit [www.merck-chemicals.com/mas-100](http://www.merck-chemicals.com/mas-100)

*Safe and convenient:  
our new C&C software.*



# And the winner is...you!

## Merck wins the VWR Award – and everybody benefits

When global supplies of Acetonitril threatened to evaporate last year, Merck pulled out all the stops to give customers what the competition could not: regular, reliable deliveries throughout the crisis. From Purchasing through Production to Logistics and Sales, everyone at the company worked flat out to keep the impact on our partners to a minimum.

For VWR International, that was reason enough to give us their coveted Best Supplier Award 2009 at this year's European Sales Conference in Madrid. At the ceremony, the company also praised the way we tailor our workflows so closely to customer requirements that although thousands of products are involved, processes stay smooth and seamless throughout.

*Smooth, seamless deliveries – come what may.*

While we're delighted to receive the prestigious VWR Award, we have no intention of resting on our laurels. Instead, it will inspire us to do better still in future – for the benefit of customers everywhere.

## Challenges welcome

### RegAffairs Customer Care Services: expert support whenever you need it

It's not often someone complains about a high-quality Merck product. But when they do, they are in expert hands with our Customer Care Services. Drawing on their vast know-how and experience, the specialists in this cross-discipline team pull out all the stops to provide 100% support throughout. And because they're at the interface to so many different departments, they have full access to all the resources they need.

As soon as our experienced Quality Control Labs and/or production plants complete their root cause analysis, they team up with the involved departments to implement a program called CAPA

(Corrective Action and Preventive Action).

The aim is to remedy the situation, and to make sure it cannot recur in future. That way, all our other customers benefit from their actions, too.

The same team also handles about 6,000 product-related technical queries a year, or roughly 25 a day. Our Performance Life Science Chemicals portfolio contains around 20,000 products – so despite the clear structure, a little expert assistance is often appreciated.

*Our Customer Care Service team:  
Experts for quality complaints  
and product queries.*



# One step only

## ZIC®-HILIC HPLC columns for ion analysis

*SeQuant™ ZIC®-HILIC HPLC columns  
simplify counterion analyses.*

Good news for labs that perform counterion analyses: By using SeQuant™ ZIC®-HILIC HPLC columns instead of ion chromatography, you can save time and effort. And if you already have the detectors, there's no need to invest in new equipment first.

Thanks to the zwitterionic characteristic of ZIC®-HILIC HPLC, you can quantify both anions and cations at the same time – without having to switch detection modes, and without having to change the column or eluent you're using. So instead of a two-step process, you can perform the entire analysis in HPLC instead.

The only requirement is a HPLC system with a suitable detector, such as evaporative light scattering or charged aerosol. The ZIC®-HILIC approach has another advantage, too: compared to IC, it's far less restrictive with

regard to the allowable organic percentage of the eluents you use – typically at least 50% organic solvent is used. This is particularly useful when you're analyzing drugs with poor water solubility. For full details of our SeQuant™ ZIC®-HILIC HPLC columns, visit [www.sequant.com/zichilic](http://www.sequant.com/zichilic). For more information on counterion analysis with ZIC®-HILIC, please visit [www.sequant.com/ion-analysis](http://www.sequant.com/ion-analysis)



# Inspired by excellence

## Merck ready-to-use microscopy products

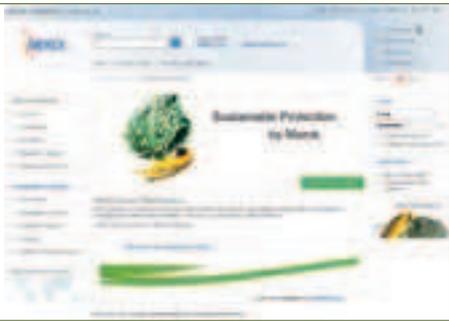
As a long-standing supplier of top-quality microscopy products, we know how important it is to keep pace with changing requirements and environmental guidelines. At the same time, we know from experience that reproducibility is the key to success. So while we never stop adding value to our products – for example, by reducing or removing toxic ingredients wherever possible –, we

*Safe and convenient:  
Merck ready-to-use  
microscopy products.*

always make sure our innovations build on existing procedures, and will make handling as easy as possible.

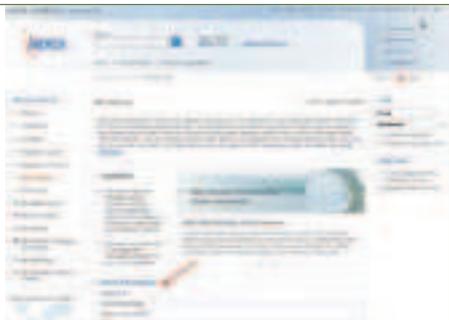
With a wide range of ready-to-use products for hematology, cytology, histology, and bacteriology, we deliver the consistent high quality you need to streamline your workflow. And because diagnosis of human samples calls for even stricter quality standards, we screen all raw materials and solvents rigorously and repeatedly before use. The resulting products are classed as In Vitro Diagnostic Medical Devices (IVD), and bear the CE (Community of Europe) stamp on the label to show they comply with the relevant guideline for quality management. As an additional safety precaution, you can download instructions on how to use all CE-registered products from [www.merck-chemicals.com/microscopy](http://www.merck-chemicals.com/microscopy)

# Read all about it



The new Safety & Environment section at [www.merck-chemicals.com](http://www.merck-chemicals.com) tells you everything you need to know about our approach, and how it relates to specific products. There's a four-minute campaign video for the bigger picture – plus separate module pages with in-depth information on the following topics: Time Travel (a fascinating description of how far we've come in protecting people and the environment), Information Support, Packaging Innovations, and Products.

# Kinder to your mouse



Fed up with time-consuming online searches to find out which products suit which bacteria and methods? Our new microbiology matrix browser is for you. Instead of drilling down through endless levels of data, you can now get all the information you need with just a few clicks of the mouse. Here's how it works:

- 1 Go to [www.merck-chemicals.com/microbiology](http://www.merck-chemicals.com/microbiology)
- 2 Click a category (e.g., Food and Beverage) and sub-category (e.g., Cereals)
- 3 Choose the bacterium you want to work with (e.g., Enterococcus), then move your mouse across the chart for details of sample preparation/dilution, non-selective/selective enrichment broths, and isolation, identification, and/or enumeration.

# Upcoming events

August 29 – September 02	EuCheMS-congress with the awarding of the Heinrich-Emanuel Merck prize to Luisa Torsi	Nuremberg, Germany
September 15 – 17	Analytica China	Shanghai, China
October 22 – 23	Food Ingredients FI	Mumbai, India
November 10 – 12	BRAU Beviale	Nuremberg, Germany
November 16 – 18	Health Ingredients HI	Madrid, Spain
November 17 – 20	Medica	Düsseldorf, Germany

Published by:

Merck KGaA

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Content:

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Layout:

Kemper Kommunikation GmbH

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