

MERCK

KEY INGREDIENTS

- ✓ Testing
- ✓ Quality Assurance
- ✓ Your Dedication to Safety

Food Testing Heroes are essential.

We have products to support you.

Find your solutions.



Millipore®

Preparation, Separation,
Filtration & Monitoring Products

Milli-Q®

Lab Water Solutions

Supelco®

Analytical Products

Sigma-Aldrich®

Lab & Production Materials



Merck has brought together the world's leading Life Science brands, so whatever your life science problem, you can benefit from our expert products and services.

Supelco®

Analytical Products

The Supelco® portfolio of analytical solutions of Merck is developed by analytical chemists for analytical chemists to ensure your results are accurate, precise and reproducible. Every product is meticulously quality-controlled to maintain the integrity of your testing protocols and, with our dedicated scientists, the expertise you need is always on hand.

Millipore®

Preparation, Separation,
Filtration & Monitoring Products

The Millipore® portfolio of Merck offers an ecosystem of industry-leading products and services, spanning preparation, separation, filtration and monitoring – all of which are deeply rooted in quality, reliability and timetested processes. Our proven products, regulatory and application expertise are a strong foundation you can rely on to consistently perform at the highest level.

Sigma-Aldrich®

Lab & Production Materials

The Sigma-Aldrich® portfolio of Merck offers a strong and ever-expanding offering of lab and production materials. Through our technical support and scientific partnerships, we help connect our customers with a whole world of progress.

Milli-Q®

Lab Water Solutions

The Milli-Q® portfolio of lab water solutions of Merck takes care of all your water quality and purity needs. Our solutions are backed by consistent quality and full compliance and work seamlessly together to let you focus on your vital work.

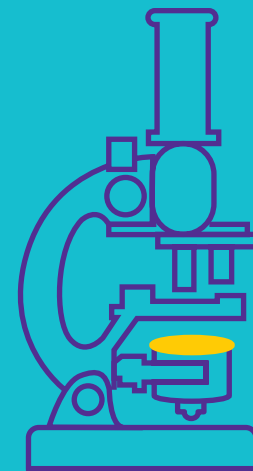
Workflow solutions for Food & Beverage testing & analysis



Workflow: Food & Beverage Solutions



Click on each to discover more



Preparation



Chemical Sample
Analysis



Microbiology Sample
Analysis



Calibration,
Qualification &
Documentation



Analytical Sample Prep



Microbiology Sample Prep

Key to Icons



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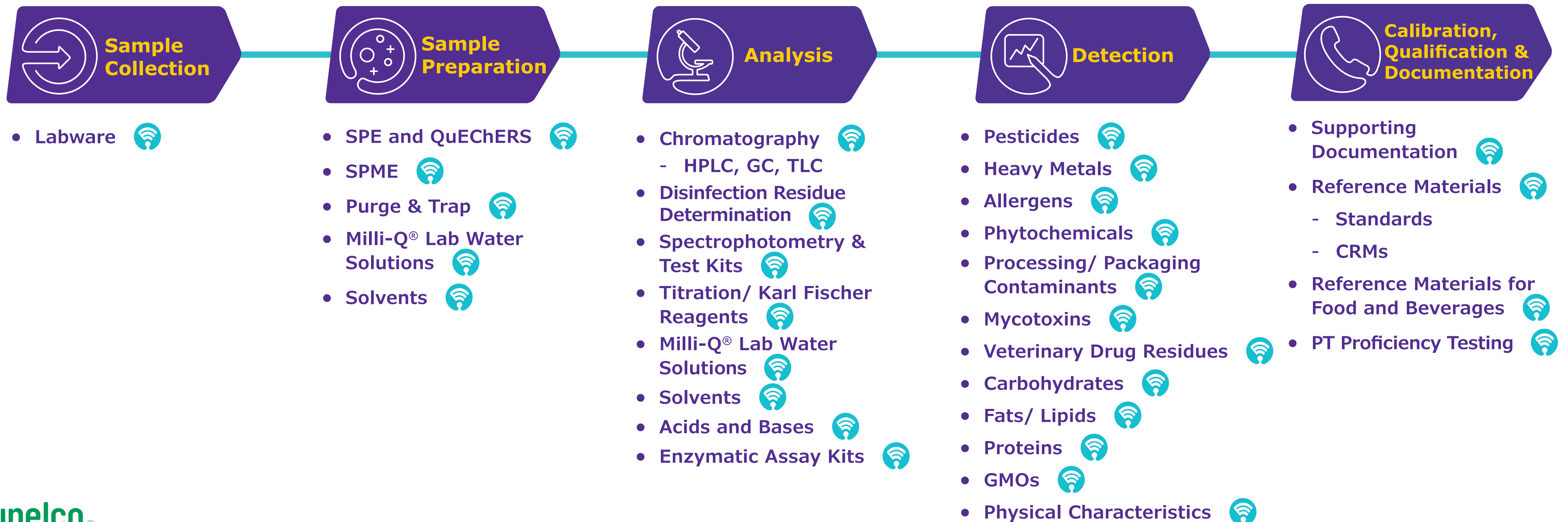
Chemical Analysis for Water & Beverages



Sip. Sip. SAFE!

Beverage Chemical Analysis

Whether you are determining the nutritional value, testing for contaminants (pesticides, residues, natural toxins etc.), or troubleshooting a specific challenge, we understand the importance of sourcing analytical products that match your high standards for your beverage products.



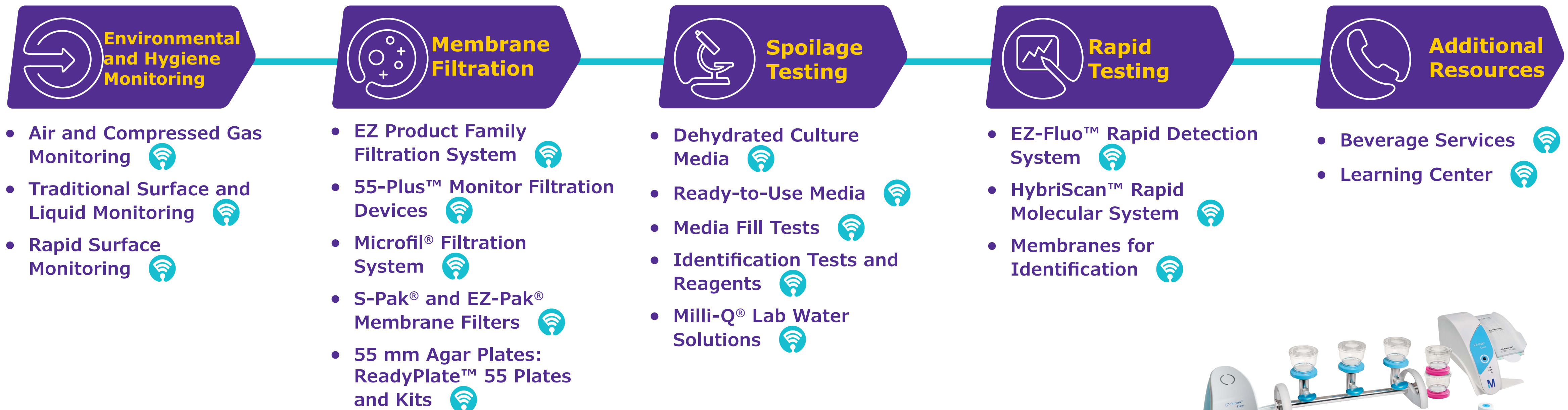
Microbiology Testing for Water & Beverages



Refreshingly Safe

Beverage Microbial Sample Analysis

Microbiological testing of beverages and water is essential to ensure they are safe to drink, but also to prevent spoilage. We offer a full range of products for the detection of spoilage bacteria, yeasts, molds, and pathogens in raw materials through to the finished products, whether you're producing wine, beer, soft drinks or bottled water.



Beef Testing & Analysis

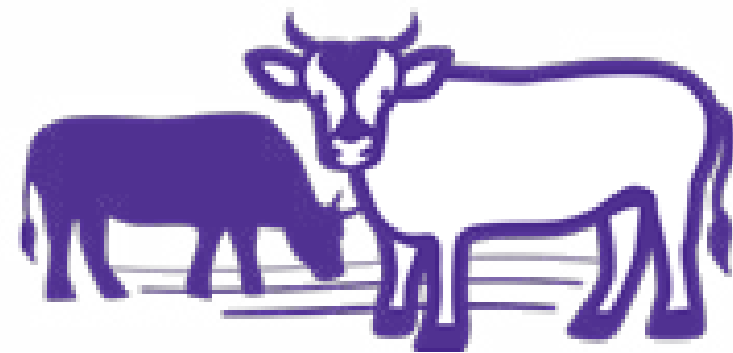


key ingredients

✓ Pickles

✓ Onions

✓ Your Dedication to Safety



Products & solutions for:

- Brucellosis
- Urinary analysis for veterinary drugs
- Detection of disease carrying ticks
- Bovine DNA sampling
- Feed analysis



Products & solutions for:

- Veterinary drug residue analysis
- Beef related analytical standards
- Pesticide residue analysis
- Food borne pathogen detection: pathogenic *E. coli*, *Salmonella*, *Listeria*, *Campylobacter*, *Bacillus cereus*, *Yersinia*, *Shigella*, *Staphylococcus*
- Meat spoilage organisms testing: generic *E. coli*, *Enterobacteriaceae*, Total viable counts



Products & solutions for:

- Food Fraud: DNA Standards & DNA Extraction
- Analysis of beef fat
- Assay kits for beef analysis



Dairy Testing and Analysis



key ingredients

✓ Grains

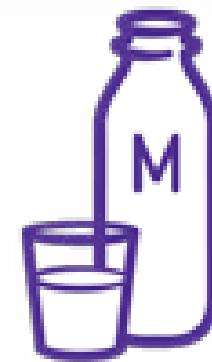
✓ Milk

✓ Your Dedication to Safety



Products & solutions for:

- Measuring mastitis
- Neutral liquid detergent
- Agricultural contaminant exposure



Products & solutions for:

- Milk processing
- Flavor and fragrance additives for dairy products
- Dairy pathogen detection:
Staphylococcus, Salmonella, Listeria, Streptococci, Pseudomonas, Campylobacter, pathogenic E. coli, Yersinisa, Yersinia



Products & solutions for:

- Dairy product quality and nutrition
- Probiotics and human health
- Assay kits for milk and dairy nutritional analysis
- Kosher ingredient analysis
- Flavor and fragrance additives for dairy products



Fruit and Vegetable Analysis



key ingredients

- ✓ Lettuce
- ✓ Tomatoes
- ✓ Your Dedication to Safety



Multiple tests to keep fruit & vegetables safe and compliant

While the general public knows the importance of eating their 5-a-day in fruit and vegetables to stay healthy, many have no idea the amount of tests that are involved to ensure that their morning smoothie and detox salad is safe, tasty and providing the highest nutritional value possible.

Nutrition Labeling	Chemical contaminant	Allergen	Microbiology
Protein	Pesticides	Pollen	Coliform
Carbohydrate	Heavy Metals	Egg	Salmonella
Fat	Mycotoxins (Aflatoxins)	Tree Nuts	E. coli
Sugar	Antibiotics	Food Allergen Regulations	Yeast & Mold



Poultry & Egg Testing and Analysis



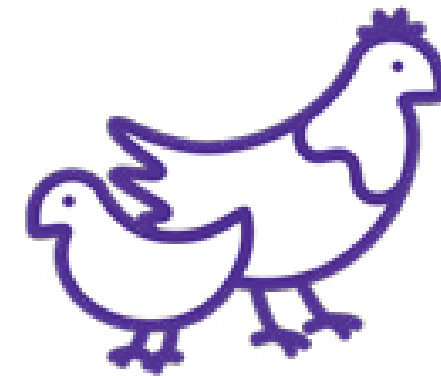
key ingredients

- ✓ Chicken
- ✓ Egg
- ✓ Your Dedication to Safety



Products & solutions for:

- Fipronil contamination
- Nitroimidazole contamination
- Glyphosate residue
- *Salmonella* detection
- Rapid microbial molecular detection
- High throughput pathogen detection



Products & solutions for:

- *Salmonella* contamination testing
- *Campylobacter* testing for poultry flocks
- Mycotoxin detection
- Antibiotic & Acid NSAID residue analysis



Products & solutions for:

- Food borne pathogen detection: *Salmonella*, *Campylobacter*, *Listeria*, *Shigella*, *Staphylococcus*
- Reference materials and CRMs for microbiology
- Heavy metal detection



Products & solutions for:

- Assay kits for poultry analysis
- Meat-quality identification via pH-measurement
- Nitrite, chloride and phosphorus analysis
- *Salmonella* contamination testing



Beer Testing and Analysis

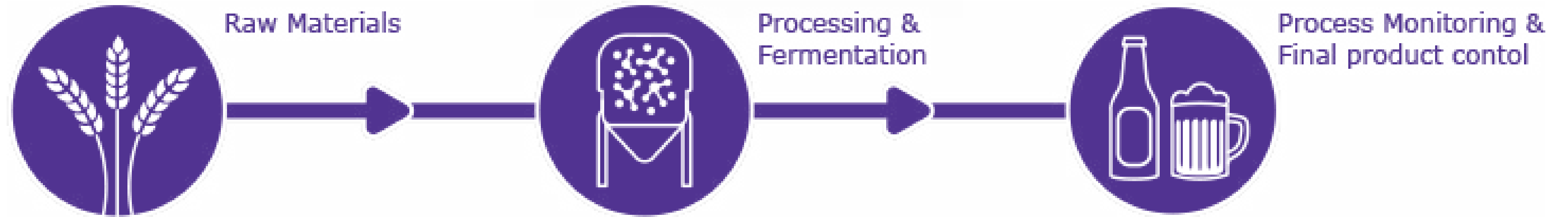


key ingredients

✓ Hops

✓ Yeast

✓ Your Dedication to Safety



Products & solutions for:

- Gas chromatography (GC)
- High performance liquid chromatography (HPLC)
- Media for brewery and spoilage detection
- Ready-to-use media for beverages and water testing
- Rapid oligo-based detection
- Pesticide detection by LC/MS/MS
- Reference materials for foods and beverages
- Water purification

Products & solutions for:

- Traditional surface and liquid monitoring
- Rapid surface monitoring
- Media fill tests
- Analytical sample preparation
- Gas chromatography (GC)
- High performance liquid chromatography (HPLC)
- Membrane filtration system
- Disinfection residue testing
- Dehydrated culture media for beverages and water
- Microbial air monitoring
- Chemical testing kits
- Molecular biological detection of spoilage organisms

Products & solutions for:

- Buffers
- Dehydrated culture media for beverages and water
- Media fill tests
- Rapid surface/hygiene monitoring
- Ready-to-use media for beverages and water testing
- Membrane filtration system
- Rapid oligo-based detection
- Identification tests and reagents
- Analytical standards and CRMs
- Analytical sample preparation
- Gas chromatography (GC)
- High performance liquid chromatography (HPLC)
- Acids and bases
- Chemical testing kits for beer



Products for Pathogen Testing



Learn more about the Usual Suspects:



- [*Campylobacter*](#)
- [*Cronobacter*](#)
- [*E.coli*](#)
- [*Listeria*](#)
- [*Salmonella*](#)
- [*Shigella*](#)
- [*Staph. aureus*](#)



- [Traditional Culture Media](#)
- [Ready-to-use Culture Media](#)
- [Alternative Culture Media Methods](#)
- [Certified Reference Microorganisms](#)
- [Lateral Flow Tests](#)
- [Molecular Detection \(PCR\)](#)
- [Automated ELISA Tests](#)

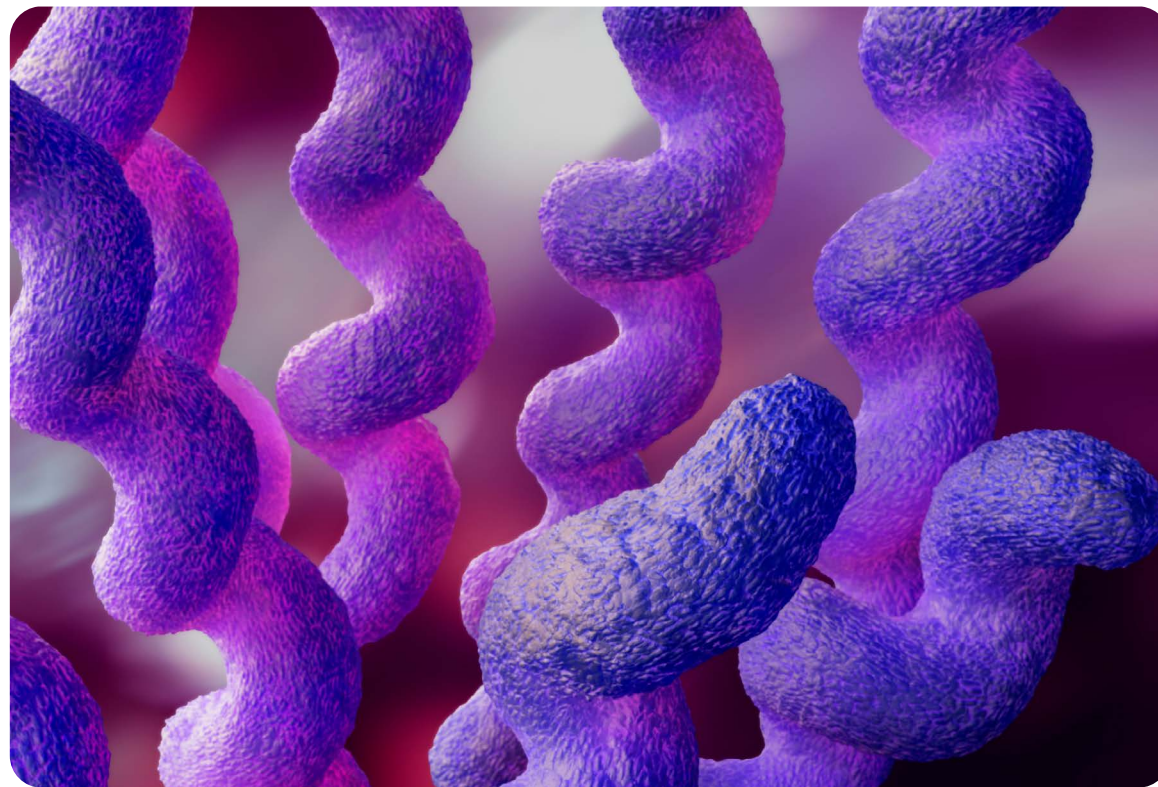
Pathogen testing - *Campylobacter*



Campylobacter



Campylobacter spp. are regarded as the leading cause of bacterial gastroenteritis in humans worldwide. Infections are usually caused by consuming cross-contaminated or insufficiently processed foods. There is an increasing demand for *Campylobacter* testing in food to meet new regulations regarding contamination levels, specifically in poultry.



- Gram Negative, Motile Rods
- Oxidase and Catalase Positive, non fermentative.
- Heat sensitive (cells destroyed at temps $>48^{\circ}\text{C}$)
- Generally survive in low oxygen environments.
- Found in poultry, red meat, shell fish and unpasteurised milk



Pathogen testing - *Cronobacter*



Cronobacter



Cronobacter spp. are frequently found on vegetables, meat, fermented bread, dairy products and especially in baby food. Consumption of contaminated powdered infant formula milk (IFM) can result in sepsis, and infant meningitis. In most cases the victims are pre-term infants, low birth weight infants or immunocompromised infants in the first weeks.



- Gram Negative, Motile Rods
- Oxidase Negative
- Facultative Anaerobe
- Found in dairy products especially infant formula



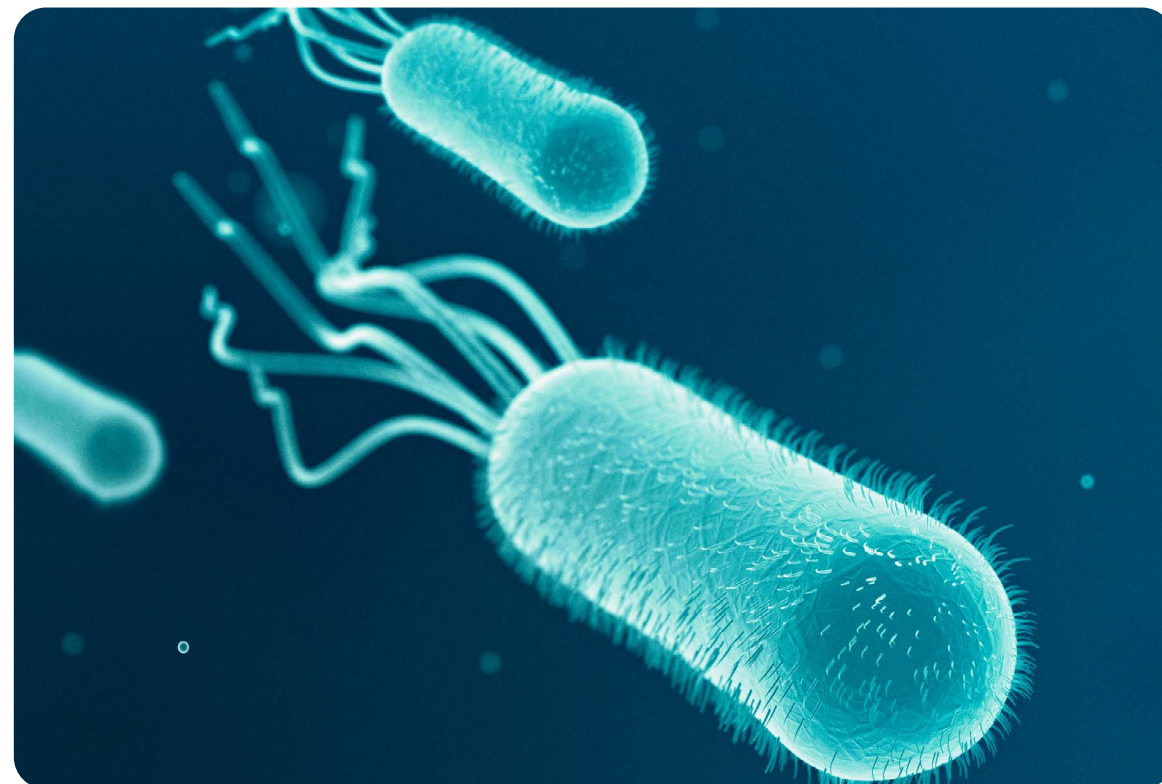
Pathogen testing – *E.coli*



Escherichia coli



According to the U.S. Center for Disease Control (CDC), the large and diverse bacterial group of *Escherichia coli*, (*E. coli*) contain numerous mammal-associated strains with many harmless, some beneficial, and some harmful to human health. Pathogenic *E. coli* strains (6 pathotypes) typically cause gastrointestinal distress and are associated with diarrhea and collectively are referred to as diarrheagenic *E. coli*, with the STEC pathotype often in the news as the culprit in food-borne illness outbreaks.



- Gram Negative, Oxidase Negative
- Facultative anaerobe
- Rod Shaped
- Found in raw or undercooked ground meat, raw milk and vegetables / salads



Pathogen testing – *Listeria*



Listeria



Listeriosis is a serious infection caused by *Listeria monocytogenes*. The disease affects primarily people of advanced age, pregnant women, newborns, and adults with weakened immune systems. Listeriosis manifests in flu-like symptoms, fever, muscle aches, and sometimes gastrointestinal symptoms such as nausea or diarrhea. If infection spreads to the nervous system, symptoms such as headache, stiff neck, confusion, loss of balance, or convulsions can occur.



- Gram Positive
- Non-spore forming, Catalase positive
- Rod Shaped
- Found in raw or processed meat, raw milk products raw or smoked fish, ready prepared salads



Pathogen testing – *Salmonella*



Salmonella



Infection with *Salmonella* or Salmonellosis can be extremely severe, particularly for young children, the elderly and the immuno-compromised. It is generally contracted through the consumption of contaminated food. Symptoms include diarrhea, abdominal pain, nausea and vomiting and can last from 1 to 7 days.



- Gram Negative, rod shaped
- Oxidase Negative
- Facultative anaerobe
- Found in eggs, meat, poultry and milk



Pathogen testing – *Shigella*



Shigella



Shigella spp are genetically, extremely closely related to *E. coli*. Fecal contamination of water and unsanitary treatment by food handlers are the most common causes of infection.



- Gram Negative, non-motile
- Facultative anaerobe
- Oxidase Negative
- Found in salads, raw vegetables, milk and dairy products, and poultry



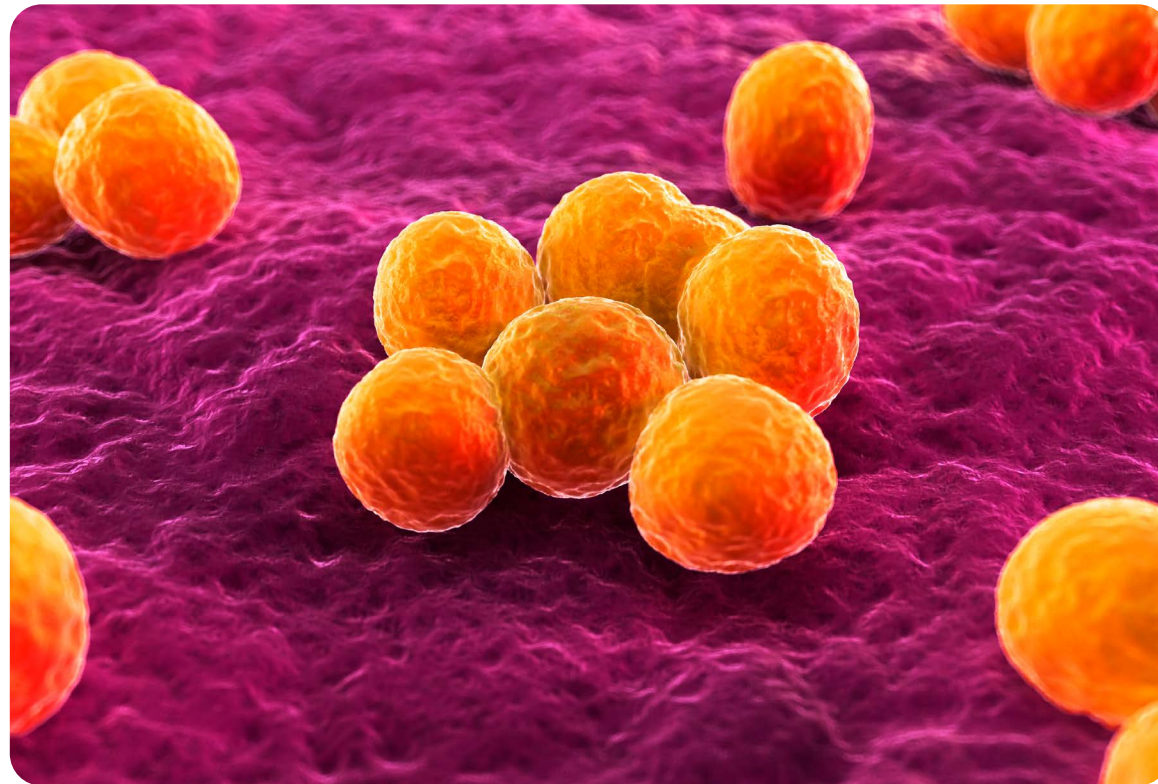
Pathogen testing – *Staphylococcus aureus*



Staphylococcus aureus



Staphylococcus aureus can be found naturally as part of the skin flora in 20-30% of the human population. However it is an invasive pathogen that can cause disease in almost any tissue or organ in the human body, primarily in compromised individuals.



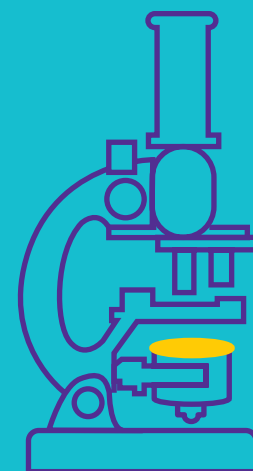
- Gram Positive cocci
- Non spore former
- Catalase Positive
- Facultative anaerobe
- Found in water, meat, eggs and dairy products



Workflow: Food & Beverage Solutions



Click on each to discover more



Preparation



Chemical Sample Analysis



Microbiology Sample Analysis



Calibration, Qualification & Documentation



Analytical Sample Prep



Microbiology Sample Prep



Chromatography Sample Prep



SPME



SPE & QuEChERS



Millex® Filtration Tools



Solvents



Milli-Q® Lab Water Systems

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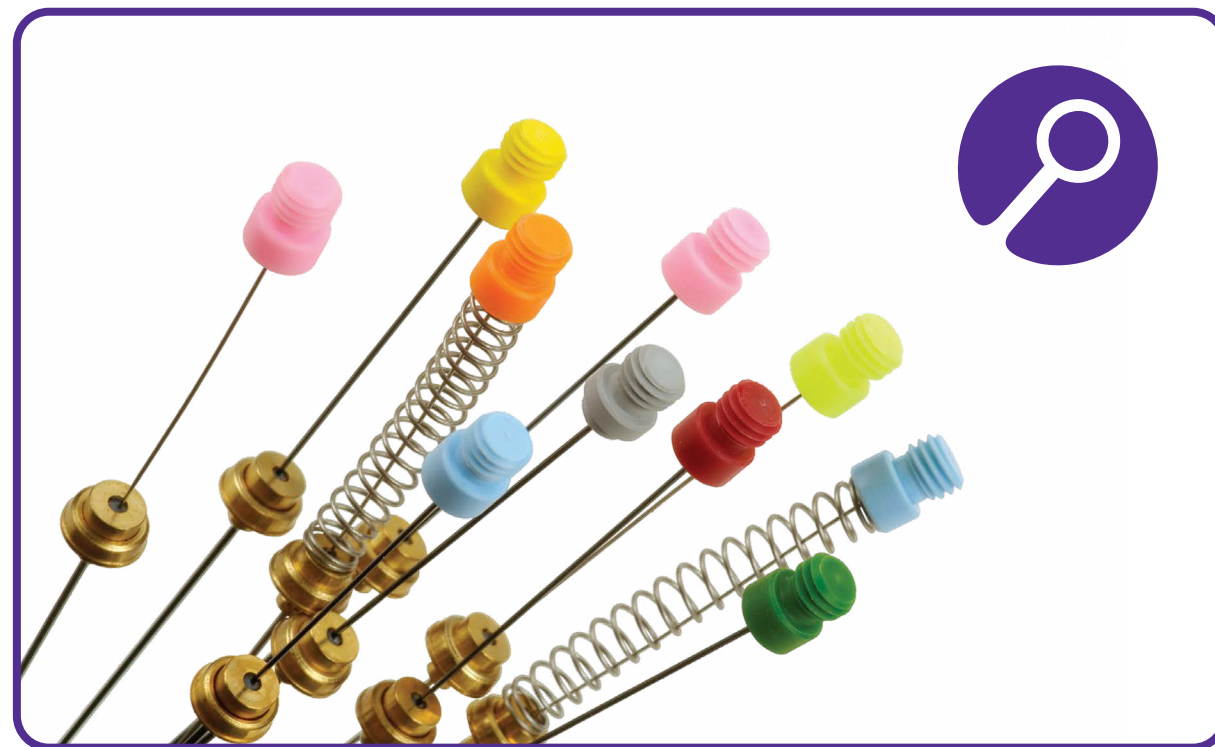
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Analytical Sample Prep



Chromatography Sample Prep

Our sample preparation and purification portfolio includes products for solid phase extraction (SPE), solid phase microextraction (SPME), enzymatic-based kits for food analysis, and flash chromatography and LPLC. Our comprehensive range features products for multi-residue pesticide analysis (QuEChERS and dispersive SPE) that can handle the most challenging compounds.



Solid Phase Microextraction



Solid Phase Extraction



QuEChERS (dSPE)



Analytical Sample Prep



Filtration Tools

We provide a range of membranes and filter holders to support filtration needs across multiple solvent and sample types.



Membranes Filters, Filter Holders and Accessories

Membrane Filters

- Durapore® polyvinylidene fluoride (PVDF).
- Millipore Express® polyethersulfone (PES).
- MF-Millipore™ mixed cellulose esters (MCE).
- Fluoropore™ and Omnipore™ polytetrafluoroethylene (PTFE).
- Isopore™ polycarbonate.
- Strat-M® membrane for transdermal diffusion studies.

Filter Holders and Accessories

- Millicup™-FLEX disposable vacuum filtration units.
- Glass and stainless steel vacuum filter holders.
- Pressure vessels.

Nonsterile Millex® Syringe Filters

Prepare samples using low-extractable Millex® syringe filters to ensure clean baselines and protect instrument performance for dissolution testing, LC-MS, HPLC, ion chromatography, and more.

A better way to use Millex® Filters

The Simplicity® G2 filtration system is a vacuum-assisted alternative to manual syringe filtration for labs that prepare many samples per day.



Millipore®

Preparation, Separation,
Filtration & Monitoring Products





Microextraction Devices for Limited Sample Size



Solid Phase Microextraction (SPME) is an innovative, solvent-free sample preparation technology that is fast, economical, and versatile. SPME has gained widespread acceptance as a preferred technique for many applications in food & beverage and flavors & fragrances analysis.



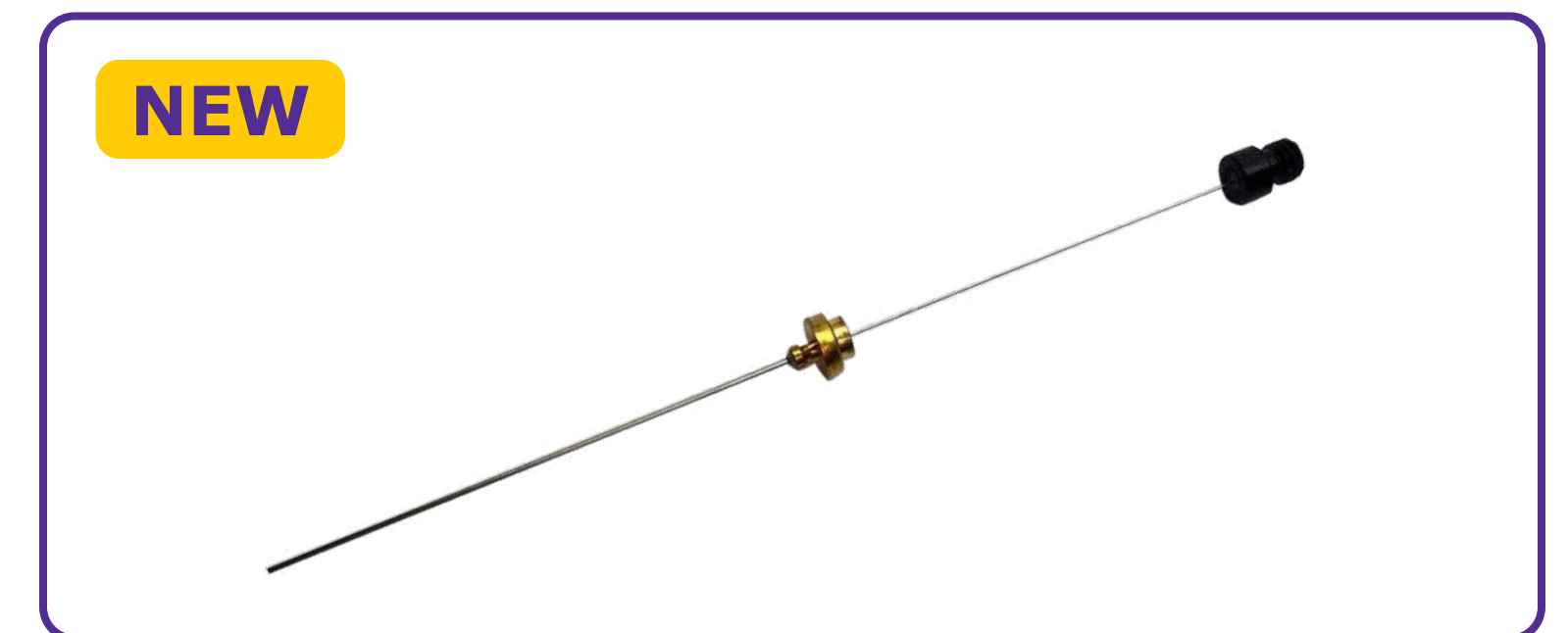
Smart SPME Fibers

- Can be used with the PAL autosampler system.
- Equipped with a unique smart chip, they enable traceability, ease of use and increased productivity through automation.



Overcoated SPME Fibers

- For direct immersion into complex food samples
- Physically robust and resistant to fouling
- Longer fiber life and more reproducible results



Nitinol-core SPME Fibers

- Enhanced fiber reproducibility
- Greater fiber durability
- Maintained selectivity for method consistency
- Core inertness to ensure analyte stability



Analytical Sample Prep



SPE & Dispersive SPE (QuEChERS)

Our portfolio covers general Solid Phase Extraction (SPE) products as well as special and dedicated tools e.g. for improved matrix removal or analyte extraction.



Solid Phase Extraction

- **Supel™ Tox** - SPE Cartridges for mycotoxin analysis
- **Supelclean™ Ultra 2400** for efficient cleanup of extracts of dry/complex matrices (spices, tea, coffee, etc.)
- **Supelclean™ EZ-POP NP** - Simple, effective extraction of non-polar persistent organic pollutants from edible oil samples
- **SupelMIP®** - Selective analyte extraction from complex matrices
- **Discovery® Ag-ION SPE** - FAME fractionation for the resolution of cis/trans isomers



QuEChERS

- **Supel™ QuE Products** – A complete offer (incl. EN & AOAC methods)
- **Supel™ QuE Z-Sep Adsorbents** for more efficient fat & pigment removal
- **Supel™ QuE Verde** for green matrices - efficient chlorophyll removal with good recovery of planar pesticides



Analytical Sample Prep



Discover the Solvent Center

Discover our solvent center created to aid all visitors in their exploration of the right solvent by providing a concise summary of solvents by purity, grade, application, product lines or market, as well as packaging options, literature listings and special offers.



Solvents for Research

- ReagentPlus® Grade
- ACS Grade and Pharmacopeia
- Anhydrous Solvents
- Bio-tech Solvents
- Greener Alternatives
- Solvents for DNA and Peptide Synthesis



Solvents for Classical Analysis

- EMSURE® Premium Grade Products
- EMPARTA® Standard Grade Products
- EMPLURA® Basic Grade Products



Solvents for Instrumental Analysis

- HPLC
- LC-MS
- UHPLC-MS
- HPLC Blends
- GC Headspace
- GC-ECD/GC-FID
- GC-MS
- Spectrophotometric Solvents
- NMR

Supelco®
Analytical Products

Sigma-Aldrich®
Lab & Production Materials



Analytical Sample Prep



Milli-Q® Pure and Ultrapure Water Purification Systems

Turn tap water into Type 2 (pure) and Type 1 (ultrapure) water with Milli-Q® IQ 7003+ Water Purification Systems



Milli-Q® IQ 7003/05/10/15 pure and ultrapure water system

The right water quality for all your samples:

Select consistently pure water quality for your basic analyses, and high-quality ultrapure water for your most sensitive analyses

Simple and intuitive dispensing:

With the touch of a finger, obtain water at the flow rate you need; or program your desired volume and walk away

Effortless maintenance:

The system notifies you when it requires attention, and onscreen graphic instructions provide step-by-step guidance

Easy data management and traceability:

View water quality and system data onscreen, download individual reports, or access a complete history in the system's memory



Analytical Sample Prep



Milli-Q® Lab Water Solutions for All Your Water Purity Needs

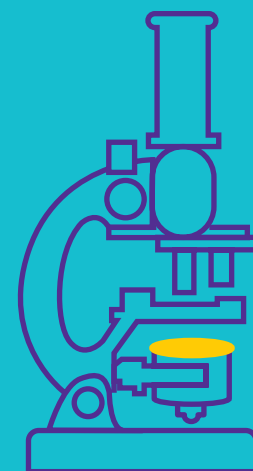
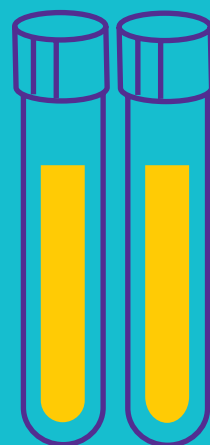


Milli-Q® IQ 7003/05/10/15 pure and ultrapure water system

Workflow: Food & Beverage Solutions



Click on each to discover more



Preparation



Chemical Sample
Analysis



Microbiology Sample
Analysis



Calibration,
Qualification &
Documentation



Analytical Sample Prep



Microbiology Sample Prep



Homogenizer and Sample Dilution



Sample Enrichment

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Microbiology Sample Prep



Simplify your Food Sample Preparation with our DiluCult™ Gravimetric Dilutors and Sample Homogenizer

Automated Food Sample Dilution

Streamline your sample enrichment with our DiluCult™ gravimetric dilutors. These automated gravimetric dilutor instruments have two integrated pumps and are designed to facilitate work in a microbiological safety cabinet. They are low in height and have a removable drip tray. They operate with three modes of dispensing: a fast flow with lower accuracy, a standard flow with standard accuracy, and a slow flow for maximum accuracy. Our DiluCult™ and DiluCult™ 2 instruments can be extremely easily calibrated with a certified weight. Choose your specific dilution factor on the user interface or switch to a dispensing mode for other applications.

Advantages:

- Automate repetitive workflow steps
- Reduce hands-on time and error rates
- DiluCult™ 2 instrument accessories are ideal for pooling samples
- Add an additional pump for faster media dispensing



Millipore®

Preparation, Separation,
Filtration & Monitoring Products



Microbiology Sample Prep



Sample Enrichment with Dehydrated Culture Media

Traditional dehydrated culture media

The superior granulation technology of our traditional dehydrated culture media meets the highest industry performance standards, while guaranteeing that our products provide maximum convenience and safety.

Media granulation minimizes the formation of dust, significantly reducing the dangers associated with fine dust and toxic substance inhalation, for a safer work environment.

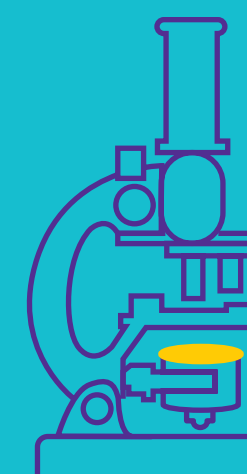
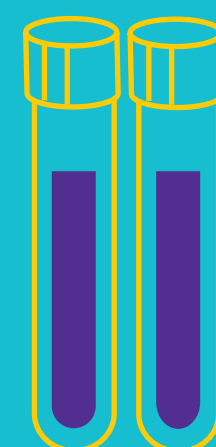
- GranuCult® granulated culture media: ISO 11133:2014 compliant
- Readybag® media format
- ChromoCult® chromogenic media



Workflow: Food & Beverage Solutions



Click on each to discover more



Preparation



Chemical Sample
Analysis



Microbiology Sample
Analysis



Calibration,
Qualification &
Documentation



Chromatography – LC-MS, HPLC & UHPLC



Chromatography - GC



Chromatography - TLC



General & KF Titration



Lab Water Systems



Rapid Chemical Testing



Disinfection Residue Checking



Spectrophotometry



Enzymatic Assay Kits



Solvents, inorganics, Safety & Essentials

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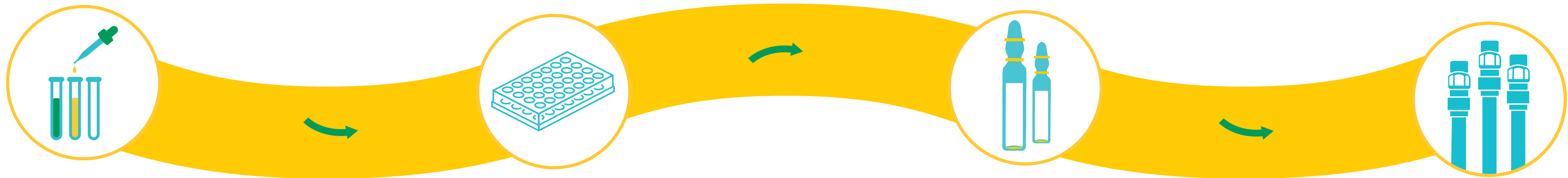
Chemical Sample Analysis



LC-MS Columns, Solvents, and Reagents for every Application

We provide a premier selection of proven analytical tools and consumables that meet the requirements of scientists who primarily use the LC-MS technique for demanding separations and analytical assays that they need to rely on.

LC-MS Workflow



Sample Collection

- Full Labware Portfolio
- Pipettes, Pipettors and Tips
- Multiwell Plates
- Microcentrifuge Tubes
- Vials

Millipore®

Preparation, Separation,
Filtration & Monitoring Products

Sigma-Aldrich®
Lab & Production Materials

Supelco®
Analytical Products

Sample Preparation

- SPE Cartridges and 96-well Plates
- SPME (BioSPME) 96-well Tips and Needle Probes
- QuEChERS dSPE
- 96-tip (dispersive) dSPE
- SLE Cartridges
- Online SPE Cartridges
- Millex® Filters
- Simplicity® Filtration System

Standardization & Calibration

- Certified Reference Materials
- Analytical Standards
- Standards Search

Chromatographic & Separation Analysis

- U/HPLC-MS Columns
- U/HPLC-MS Solvents
- LC-MS Reagents
- TLC-MS
- Reference Materials
- Accessories

**Our complete HPLC
& UHPLC offer**



Chemical Sample Analysis

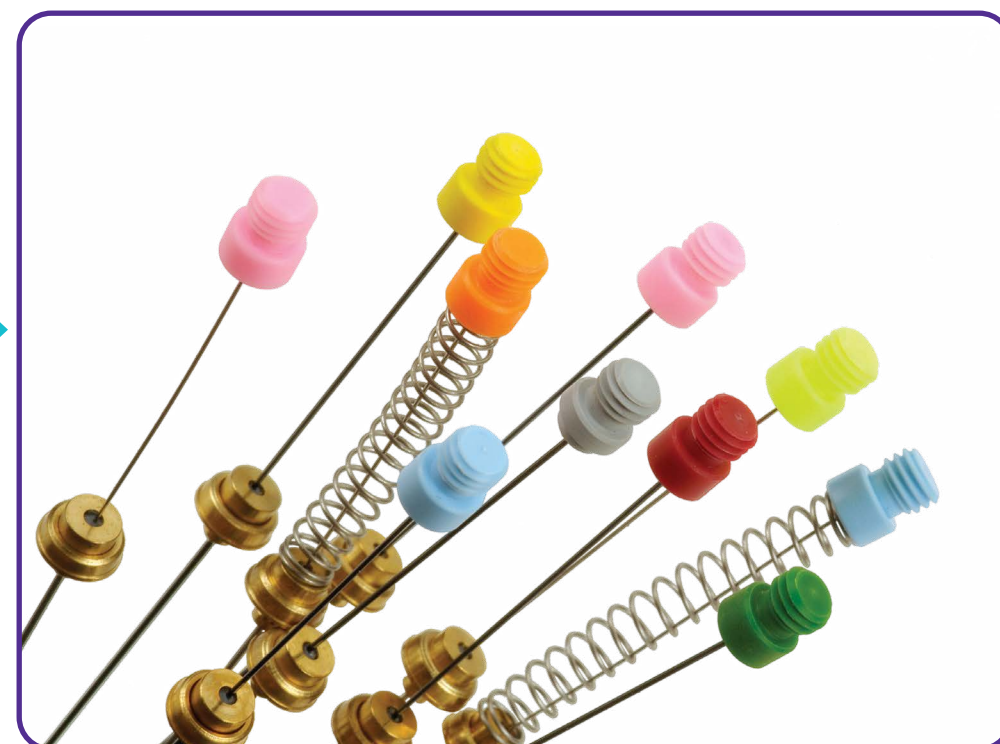


Gas Chromatography

Our full-line of capillary gas chromatography (GC and GC/MS) columns includes ionic liquid, MS-grade, Fast GC, GCxGC, chiral, and PLOT columns. Check out our comprehensive line of GC accessories, calibration standards, extraction solvents, and gas purification/management products.

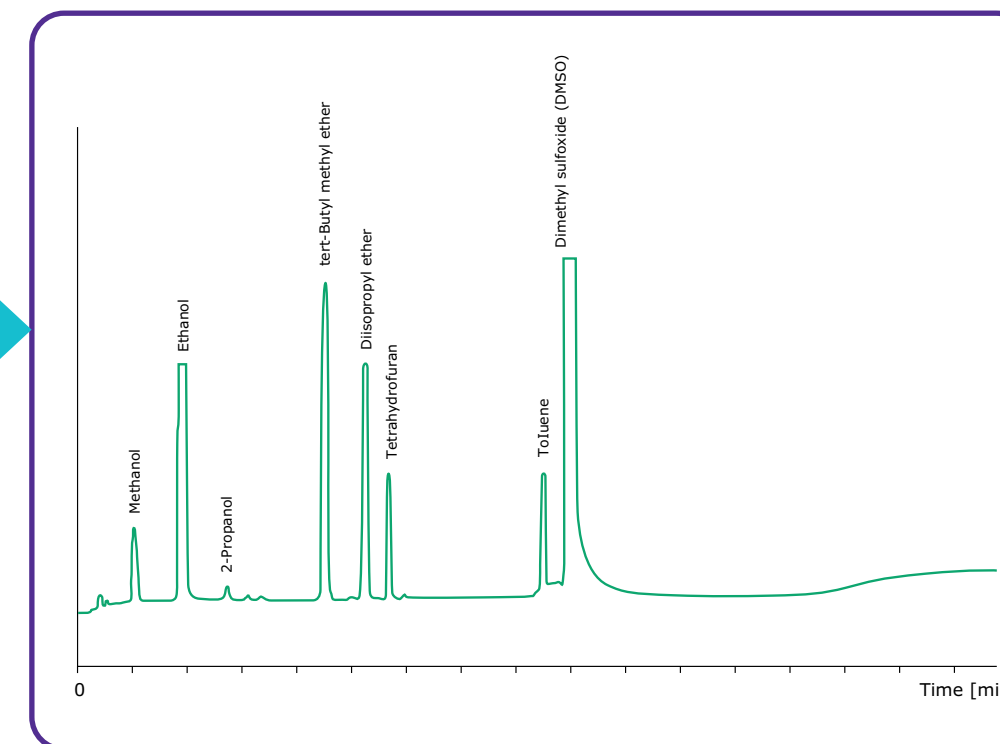


Proficiency Testing



Sample Preparation & Collection

- SPME & SPE
- Purge & Trap
- Air Monitoring
- Solvents
- Derivatization Reagents



GC Analysis

- Capillary GC Columns
- Packed GC Columns
- GC Accessories
- Gas Management
- GC Adsorbents
- GC Reference Materials



Detection & Calibration

A comprehensive portfolio of certified reference materials and reference standards available neat, in solution or in a matrix.





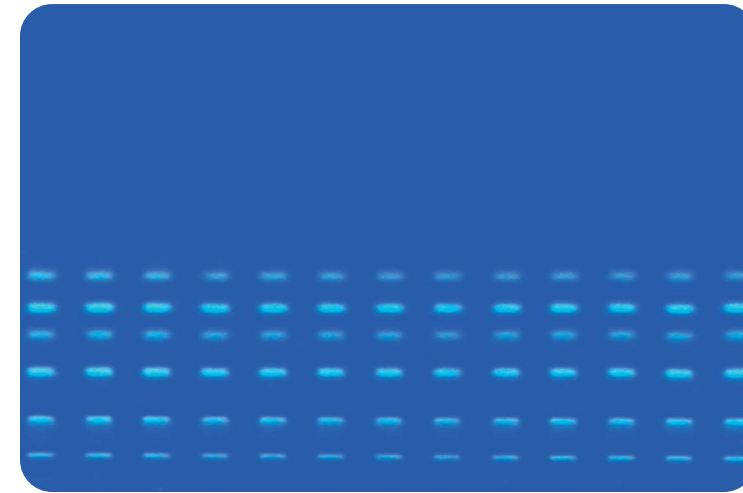
Thin-Layer Chromatography

As the leading supplier of Thin-Layer Chromatography (TLC) consumables, we offer an extensive portfolio for TLC, preparative TLC, and high performance TLC (HPTLC) including plates, reagents and accessories. Our special MS-grade TLC and HPTLC plates are designed specifically for coupling with MS.



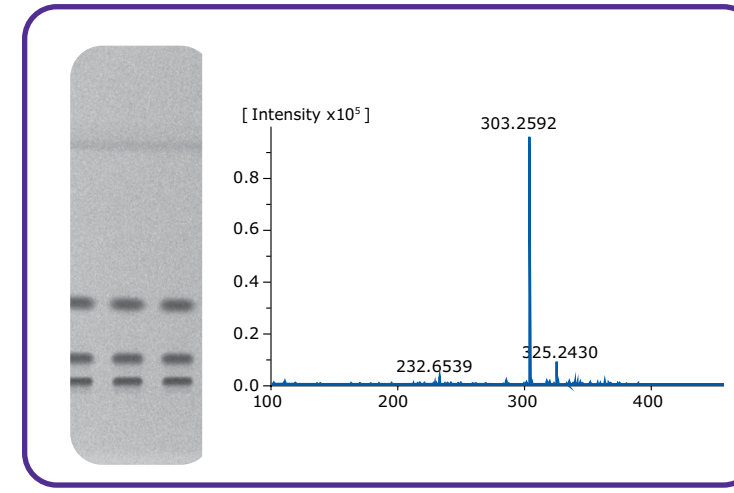
TLC Plates (Thin-Layer Chromatography)

- Silica Gel 60 Plates
- Modified Silica
- Aluminum Oxide
- Cellulose
- Kieselguhr and Mixed Layer
- Plates with Concentrating Zone
- GLP-Plates
- Multiformat Glass Plates



HPTLC Plates (High- Performance Thin-Layer Chromatography)

- Silica Gel 60 Plates
- Modified silica
- Cellulose
- LiChrospher® (optimized for High-Throughput Separations)
- ProteoChrom®
- Plates with Concentrating Zone
- GLP-Plates
- Multiformat Glass Plate



MS-grade TLC and HPTLC Plates for Mass Spectrometry

MS-grade plates for TLC-MS and HPTLC-MS allow the coupling to MS for fast trace analysis with extremely low detection limits.



PLC (Preparative Layer) Plates

Preparative layer (PLC) plates for separation and purification of samples varying in quantity.



TLC Adsorbents

Adsorbents for TLC and preparative TLC.



Accessories

Other products, such as products for plate spotting and development, visualization, sample recovery and storage.



Chemical Sample Analysis



General & Karl Fischer Titration Products for Reliable Analytical Results

Titripur® Volumetric solution, Certipur® volumetric standards and all Aquastar® Karl Fischer reagents and standards offer a complete portfolio for accurate, fast and precise titration results. Our new titration products with RFID technology make your titration process faster and more secure.



Titripur® Volumetric Solutions

Ready-to-use volumetric solutions compliant with the European/US Pharmacopeia and certified according to ISO/IEC 17025.



Aquastar® Karl Fischer Reagents

A whole range of Karl Fischer reagents for volumetric and coulometric water content determination in gaseous, liquid and solid samples.



Titripac® Volumetric Solutions

A hermetically sealed packaging available in 4 L and 10 L volume, can be directly connected to the titrator and keeps the solution stable from the first to the last drop during use.



Aquastar® Karl Fischer Water Standards

Certified Reference Materials (CRMs), produced under the double accreditation of ISO/IEC 17025 and ISO 17034.



Certipur® Volumetric Standards & pH Buffer CRMs

Volumetric standards for titer determination and buffer solutions for calibration of electrodes, both under the double accreditation of ISO/IEC 17025 and ISO 17034.



Titrisol® Volumetric Concentrates

Volumetric concentrates in ampoules offer flexibility for preparation of different concentrations of volumetric solutions.



Titration Goes Digital

Products to transfer data seamlessly from an embedded RFID on the bottles to the titrator.



Chemical Sample Analysis



Milli-Q® Pure and Ultrapure Water Purification Systems

Turn tap water into Type 2 (pure) and Type 1 (ultrapure) water with Milli-Q® IQ 7003+ Water Purification Systems



Milli-Q® IQ 7003/05/10/15 pure and ultrapure water system

The right water quality for all your analyses:

Select pure water for your basic work and high-quality ultrapure water for your most sensitive analyses. Application Paks provide targeted removal of contaminants at the point of dispense: LC-Pak® polisher for LC-MS grade water, VOC-Pak® polisher for water free of volatile organics.

Simple and intuitive dispensing:

With the touch of a finger, obtain water at the flow rate you need; or program your desired volume and walk away.

Effortless maintenance:

The system notifies you when it requires attention, and onscreen graphic instructions provide step-by-step guidance.

Easy data management and traceability:

View water quality and system data onscreen, download individual reports, or access a complete history in the system's memory.



Chemical Sample Analysis



Milli-Q® Lab Water Solutions for All Your Water Purity Needs



Milli-Q® IQ 7003/05/10/15 pure and ultrapure water system

Chemical Sample Analysis



Solvents & Reagents for all analytical & lab aspects

Discover our solvent center created to aid all visitors in their exploration of the right solvent by providing a concise summary of solvents by purity, grade, application, product lines or market, as well as packaging options, literature listings and special offers.



Solvents for Research

- ReagentPlus® Grade
- ACS Grade and Pharmacopeia
- Anhydrous Solvents
- Bio-tech Solvents
- Greener Alternatives
- Solvents for DNA and Peptide Synthesis



Solvents for Classical Analysis

- EMSURE® Premium Grade Products
- EMPARTA® Standard Grade Products
- EMPLURA® Basic Grade Products



Solvents for Instrumental Analysis

- HPLC
- LC-MS
- UHPLC-MS
- HPLC Blends
- GC Headspace
- GC-ECD/GC-FID
- GC-MS
- Spectrophotometric Solvents
- NMR



Chemical Sample Analysis



Solvents, Inorganics, Safety & Essentials

Our EMSURE® products come with the new smart label and in unique packaging with suitable safety equipment. They offer highest quality and compliance to international norms. They enable easy data access, safe and convenient use as well as reliable results, less analysis and compliance.



Smart Products

EMSURE® Premium-Grade Solvents and Inorganics for demanding or regulated Analytical applications



Smart Labels

Better data handling with our new 2D smart labels, embedding a 2D data matrix barcode which allows for processing directly in your LIMS or ERP system.



Smart Handling

- Withdrawal systems for solvents
- Withdrawal systems for inorganics
- Acids in Safebreak bottles
- Packaging and Safe Handling
- Safety Accessories



Chemical Sample Analysis



Disinfection Residue Checking

Mobilize Your Laboratory with Our Spectroquant® Move Instruments

A robust portable handheld colorimeter for rapid on-site analysis with reliable results

Disinfection control with test strips 



Our MQuant® Test Strips and our Reflectometer RQflex® 20 allow you to quickly analyze chemical disinfectant parameters to ensure the safety of your production line after disinfection.

Spectroquant® Move DC for Disinfection Control 



- One Move for key parameters in disinfection control
- Our robust portable colorimeter Move DC for rapid on-site analysis of chlorine, ozone, chlorine dioxide, and pH analysis.
- Pre-programmed for high quality Spectroquant® test kits

Chemical Sample Analysis



Spectroquant® Photometric System for Water, Food & Beverage Analysis



Spectroquant® Prove Instruments

Simplicity, security, and durability are united in our spectrophotometer family Spectroquant® Prove. Three versions are available to meet a range of water, food and environmental testing needs. All instruments are conveniently preprogrammed for use with our extensive range of Spectroquant® tests and test kits.



Spectroquant® Test Kits

We provide a comprehensive portfolio of analytical test kits for your analysis. Spectroquant® Test Kits are available in two different formats:

Spectroquant® Reagent Test Kits contain all reagents for your photometric analyses and can be used with any existing cuvettes of various pathlengths, e.g. 10 mm rectangular.

Spectroquant® Cell Test Kits are ready-to-use 16 mm round cells pre-filled with reagents and no further cuvette is needed.



Spectroquant® Ready-to-use Reference Materials

When it comes to analytical quality control, standard solutions that are traceable to globally accepted primary standards are essential. With our standard solutions for photometric applications, you can perform your internal analytical quality control reliably and without extra effort. Time-consuming dilution is no longer necessary, since our standard solutions are ready-to-use and come in a range of appropriate concentrations.

Features and Benefits

- Standard solutions that are ready-to-use for accurate measurements
- Certificates of analysis with comprehensive quality documentation
- Information on concentration and expanded measurement uncertainty
- Save time and minimize errors

[Request information](#)



Chemical Sample Analysis



Rapid Chemical Testing



Reflectoquant® System - Mobile RQflex® 20 Instrument & Test Strips

- Complete system with reflectometer, test strips and kits for precise on-site quantitative analysis of critical parameters
- The RQflex® 20 reflectometer is mobile and easy to use
- Reflectometric measurement for an extensive range of parameters



MQuant® Test Strips - Screen on the Go

- MQuant® Test strips - Ultimate simplicity and reliability combined with speed
- Quick semi-quantitative tests to be used anywhere



MQuant® pH Indicator Test Strips

- Optimal solution for your needs with a broad range of pH tests
- Non-bleeding strips prevent contamination of the medium
- Transparent strips for clear results also in turbid liquids



MQuant® StripScan App

- Analysis on your smartphone – no more color guessing!
- Reliable digital test strip readout, data storage and visualization
- Advanced data analysis with StripScan Web



MQuant® Colorimetric & Titrimetric Tests

- Visual tests – easy, fast and direct readout with color cards and color disks
- Select the sensitivity you need from the diverse portfolio of readout solutions



Portable Photometry with Spectroquant® Move 100 Colorimeter

- Spectroquant® Move – the small, waterproof and dust-tight handheld colorimeter
- Rapid, flexible and accurate analyses with Spectroquant® Photometry instruments and test kits



Chemical Sample Analysis



Enzymatic Assay Kits

We offer a wide variety of convenient kits and reagents for rapid and reliable enzymatic food analysis. Like many other analytical methods, enzymatic analysis was used first in clinical diagnosis, then adapted for the determination of food ingredients. The high specificity of enzymes enables the analysis in complex sample matrixes without complicated sample preparation techniques. Food and beverages such as beer, wine, milk, drinking water, dairy products, fruits, vegetables and meat can be analysed for numerous parameters.



Features and Benefits

- Convenient, simple, sensitive, and highly dependable assays
- Most kits are suitable for high throughput screening
- Assay Kits utilize spectrophotometric and / or fluorometric detection methods

Food Industry

- Beer and Spirits
- Milk and Dairy Products
- Fruits, Vegetables and Nuts
- Meat, Poultry, Pork and Fish (Animal Protein)
- Wine
- Drinking Water

Molecular Target

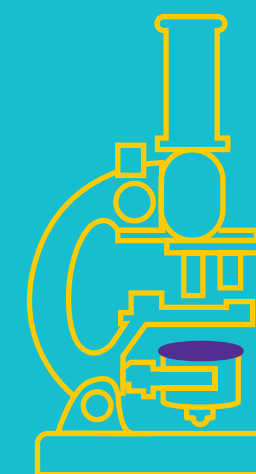
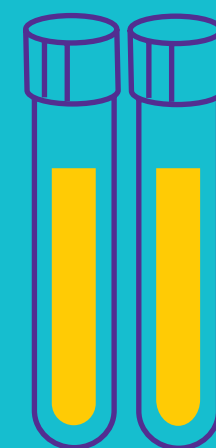
- Carbohydrates and Sugars
- Inorganic Ions
- Lipids (Fats)
- Amino Acids and Proteins



Workflow: Food & Beverage Solutions



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Preparation



Chemical Sample Analysis



Microbiology Sample Analysis



Calibration, Qualification & Documentation



Microbial Air Monitoring



Microbial Membrane Filtration



Rapid Surface Monitoring



Rapid Pathogen Detection



Culture Media



Lab Water Systems



Lateral Flow Test



Automated ELISA Tests



Microbial Identification

Key to Icons



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Microbiology Sample Analysis



Microbial Air Monitoring



Hygiene standards in a production environment are directly linked to the microbiological safety of the finished products. We therefore make sure that our active microbial air sampling solutions generate highly precise, reliable and reproducible results. We offer a comprehensive range of active and passive microbial air monitoring solutions for effective use in the food and beverage industry where regulations are on the rise, and standards become increasingly stringent.

RCS® High Flow Touch



Hand-held Microbial Air Sampler

RCS® Compressed Gas Adapter



Autoclave-able Adapter for RCS Air Samplers

HYCON® Agar Strips



Media for RCS® Microbial Air Samplers

MAS-100 Eco®



Small and Lightweight Microbial Air Sampler

MAS-100 CG® Ex



Compressed Gas Microbial Air Sampler

MAS-100 NT® Ex



Microbial Air Sampler for Hazardous Environments

LI Settle Plates



For Active and Passive Air Monitoring

MAS products: Manufactured by MBV AG, Switzerland, www.mbv.ch - MBV. Air. Nothing else.

Millipore®

Preparation, Separation,
Filtration & Monitoring Products



Microbiology Sample Analysis



Microbial Membrane Filtration

When it comes to microbiological safety testing, accurate results are key. The EZ product family has been designed to streamline your bioburden workflow and provide reliable results. The complete system is ideal for microbiological water, beverage, and using the membrane filtration method. In combination, these products provide optimal filtration performance and convenience for accurate results.



EZ-Fit® Manifold

- Different filtration heads fit to both reusable and disposable filtration devices
- Easy to prevent biofilms
- Quick-fit connections for the vacuum tubing
- Low height for ease of use in laminar flow hoods



Single-Use Filtration Funnels

- EZ-Fit® filtration units comply with water testing regulations and international standards
- Microfil® filtration system for fast and accurate routine analysis



EZ-Stream® Vacuum Pump

- Direct transfer ensures no handling of liquid waste
- High-Performance flow rate
- Designed to minimize noise
- Compact size
- Maintenance-Free technology



EZ-Pak® Membranes & Dispenser

- Robust
- Touch-free detection
- Easy membrane loading
- Easy decontamination
- Easy handling
- Lightweight and portable
- Cableless



EZ-Fluo™ Rapid Detection System

- Rapid results in 1/3 of the time in comparison to traditional techniques
- Flexible approach based on standard membrane filtration with reduced incubation time on media plate
- Non-destructive method—compatible with any ID technique
- Cost effective solution for routine use as well as investigation

Millipore®

Preparation, Separation,
Filtration & Monitoring Products



Microbiology Sample Analysis



Rapid Surface Monitoring

In order to meet the food and beverage industry's need for faster results, we have developed rapid microbiological solutions for surface and personnel monitoring. Our methods are based on ATP, NAD or protein detection; ATP and NAD are known as indicators of overall surface hygiene and cleaning efficacy. In combination with our traditional methods, our rapid testing solutions match perfectly and conveniently to fulfill your surface and personnel monitoring needs—for rapid and reliable environmental monitoring routines.

MVP ICON®



Hygiene monitoring system (ATP test)

- Advanced ATP testing and HACCP management technology
- HACCP data management for quality assurance
- Assured ATP testing and sanitation management
- Reduce time preparing for HACCP and hygiene audits

HY-RISE®



Hygiene monitoring test strips (NAD Test)

- HY-RiSE® Test Strips are the perfect media for checking the cleanliness of surfaces.
- Clear result within 5 minutes
- No instrument required
- Measures NAD, NADH & their phosphates

Flash®



Rapid allergen indicator (Protein Surface Test)

- FLASH® is a total protein visual test
- Minimize the risk of cross-contamination to allergen-free products
- 1 swab, 2 sensitivity levels
- Rapid test results with clear color interpretation

Millipore®

Preparation, Separation,
Filtration & Monitoring Products



Microbiology Sample Analysis



Rapid Pathogen Detection

Fast and accurate pathogen detection with the Assurance® GDS system

The Assurance® GDS genetic detection system combines the latest advancements in molecular detection technology and food microbiology to provide faster results with the increased accuracy required to meet today's food and environmental testing challenges. The Assurance® GDS system comprises three simple steps: Sample enrichment, Sample preparation assays utilizing our innovative GDS PickPen™ immunomagnetic separation (IMS) device, and PCR analysis with the GDS Rotor-Gene® thermal cycler.



Microbiology Sample Analysis



Culture Media

Our granulated and powder media, ready-to-use agar plates and liquid media set the trend for regulatory compliance documentation to support any audits and lab inspections. For detection of indicator organisms, we provide a broad range of granulated and powder media and highly convenient ready-to-use media for reliable food safety testing.



Dehydrated Culture Media

- Easy, fast media preparation
- Free-flowing helps ensure accurate weight
- High reproducibility and low error rates
- Minimized airborne particles for safety
- ReadyBag® media format for speed & simplified pathogen testing routines



Ready-To-Use Culture Media

Ready-to-use media solve numerous problems in microbiology laboratories where time, equipment and trained personnel are often in short supply.

- Ready-to-use agar plates
- Ready-to-use liquid media
- 2 mL liquid media ampoules



Alternative Culture Media Methods: Color-coded MC-Media Pad®

- Compliant with international food and beverage regulations
- Easy to use — fewer handling steps than traditional methods
- Reduce waste and save space
- Reliable and fast results
- Tests are available for: Total Plate Counts, Coliforms & *E. coli*, Yeasts & Molds



Rapid Culture Media Solutions for Special Matrices: SimPlate® Test

- Rapid Enumeration: our Binary Detection Technology® represents the latest technological advancement in counting techniques for the food industry.
- Easy-to-Read Results: positive and negative counts are read visually

Millipore®

Preparation, Separation,
Filtration & Monitoring Products



Microbiology Sample Analysis



Milli-Q® Pure Water Purification Systems

Turn tap water into Type 2 water with Milli-Q® IX Pure Water Systems



Milli-Q® IX pure water system

Constant, reliable pure water quality:

Pure water quality meets Pharmacopeia and ISO requirements, and is optimal for culture media preparation and ELISA tests.

Simple and intuitive dispensing:

With the touch of a finger, obtain water at the flow rate you need; or program your desired volume and walk away

Effortless maintenance:

The system notifies you when it requires attention, and onscreen graphic instructions provide step-by-step guidance

Easy data management and traceability:

View water quality and system data onscreen, download individual reports, or access a complete history in the system's memory



Microbiology Sample Analysis



Milli-Q® Lab Water Solutions for All Your Pure Water Needs



Milli-Q® IX pure water system

Microbiology Sample Analysis



Lateral Flow Test

Lateral flow tests are immunoassays for detecting food pathogens with the ultimate convenience. Covering the major pathogens, the tests act as mini-laboratories and include a built-in control reaction for optimized pathogen testing. Definitive results are delivered in as little as 20 minutes.

VIP® Gold single-step visual lateral flow immunoassay test

VIP® Gold (Visual Immuno Precipitate) are designed to be used with proprietary enrichment medium mEHEC.

Key tests/pathogens

- *Salmonella*
- *Listeria*
- EHEC (enterohaemorrhagic *E. coli*)



Singlepath® & Duopath® single-step visual lateral flow immunoassay test

Singlepath® and Duopath® Lateral Flow Tests are used in combination with our ISO regulated GranuCult® media to ensure optimal test performance.

Key tests/pathogens

- *Salmonella*
- *E. coli* O157
- *Listeria monocytogenes*
- *Campylobacter*
- *B. cereus*



Millipore®

Preparation, Separation,
Filtration & Monitoring Products



Microbiology Sample Analysis



Automated ELISA Tests

TRANSIA AG TRANSIA® PLATE

TRANSIA AG (Enzyme ImmunoAssay) and TRANSIA® PLATE incorporate proven antibody-antigen “sandwich” assay technology for the detection of food borne pathogens in both product and environmental samples. Proven Enzyme Immunoassay (EIA) technology utilizing complex, proprietary antibody formulations to overcome the challenges of differential bacterial detection.

- Accurate and reliable
- High throughput efficiency
- Increase productivity with automation

Key Tests/Pathogens:

- *Salmonella*
- *Listeria spp.*
- *Listeria monocytogenes*
- EHEC
- *Staphylococcal enterotoxins*



Millipore®

Preparation, Separation,
Filtration & Monitoring Products



Microbiology Sample Analysis



Microbial Identification

Media used for identification of bacteria by testing various biochemical reactions are sorted alphabetically and by type of test on our website. We also offer a range of

- **Biochemical reagents**
Known for the identification of specific metabolisms and to differentiate between bacteria.
- **HybriScan®**
Rapid Test Kits offer rapid, sensitive, and reliable detection of microorganisms in food, beverages, and water; additionally, the benefit of time savings of up to 10 days over cultivation-based assays.
- **Disks and Strips**
Based on rapid screening methods, are easy to use for identification or confirmation of microorganisms.
- **The test kits**
Complete and convenient packed test systems for routine determinations, based on biochemical, immunological and other reactions.



Workflow: Food & Beverage Solutions



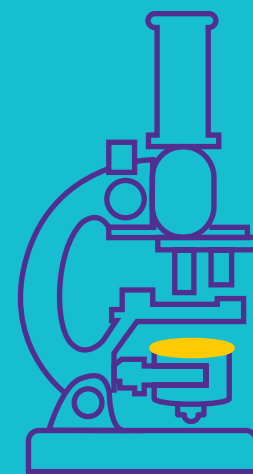
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Preparation



Chemical Sample
Analysis



Microbiology Sample
Analysis



Calibration,
Qualification &
Documentation



Standards and Certified Reference Materials



Microorganism Reference Materials



Supporting Documentation

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Calibration, Qualification & Documentation



Standards and Certified Reference Materials

Food safety matters—contaminants, pesticides, residues and natural toxins in the food chain gains more and more attention. We understand the importance of determining food’s nutritional value and quality to ensure safety. We offer a comprehensive range of high-quality and reliable reference materials solutions for your analysis workflow. From matrix materials to neat and solution standards, we are your partner in helping you deliver accurate results, meet regulatory demands and keep food safe. Our high standards match yours!

Pesticide Standards	Biotoxins	Veterinary Drugs	Other Contaminants
Pesticide Residue CRMs	Mycotoxins	Antibiotics	Heavy Metals
Metabolites	Marine Toxins	Hormones	Food Packaging Contaminants
Labelled Standards	Cyanotoxins		Organic Pollutants
	Plant Toxins		Food Dyes
			Sweeteners & E-numbers
Microbiology CRMs	Food Identity Testing	Food Quality Testing	Physical Property Standards
Bacteria	DNA Standards	Ions	Viscosity Standards
Yeast	GMO Standard	Vitamins	Conductivity Standards
Molds	Food Allergens	Fatty Acids and Lipids	Particle Size Standards
Negative Controls	Botanical Extracts	Phytochemicals	pH
	Essential Oils		Water Testing



Calibration, Qualification & Documentation



Microorganism Reference Materials

Vitroids™ and LENTICULE® discs contain viable microorganisms in a certified quantity (ISO/IEC 17025), produced under reproducible conditions (ISO 17034) with strains obtained from CECT®, NCTC and other collections. The discs consist of bacteria or fungi in a solid water soluble matrix. Microorganisms in this form are stable for at least one year and are in a viable stage (no lag phase or recovery time).



Bacteria

Yeast

Mold

Control

Find Microbiology Standards by
standard, agency or method 



Calibration, Qualification & Documentation



Supporting Documentation

As a global leader in the Life Sciences industry, we are committed to high-quality products and services, manufacturing effectiveness, and meeting our customers' expectations. Our Quality Vision states: Quality is embedded in everything we do, meaning we provide quality, compliance and business support in the most effective and efficient way for the entire portfolio of our life science business.



Quality
Management
Systems



ISO
Certificates



Quality
Services



Regulatory
Excellence



Supply Chain
Excellence



Quality and
Regulatory
Trends

Training and Education 



HELLO EXPERT!



Tell us how we can help you and an expert will be in contact with you soon.

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Back to start

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

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Lit. No. MK_BR6944EN Ver. 2.0 36438 10/2021

