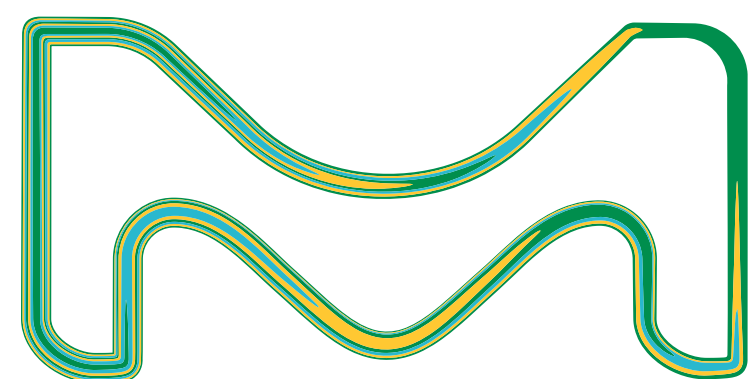


Accuracy. Precision. Consistency.

Whether you are using chromatography, spectroscopy, titration, or any other analytical chemistry technique, you can depend on accurate results, every time.



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



Supelco[®]
Analytical Products

Accuracy. Precision. Consistency.

Chromatography

Spectroscopy &
Spectrometry

Elemental
Trace
Analysis

Titration &
Karl Fischer

Physical
Properties

Sensorics

Classical
Analysis

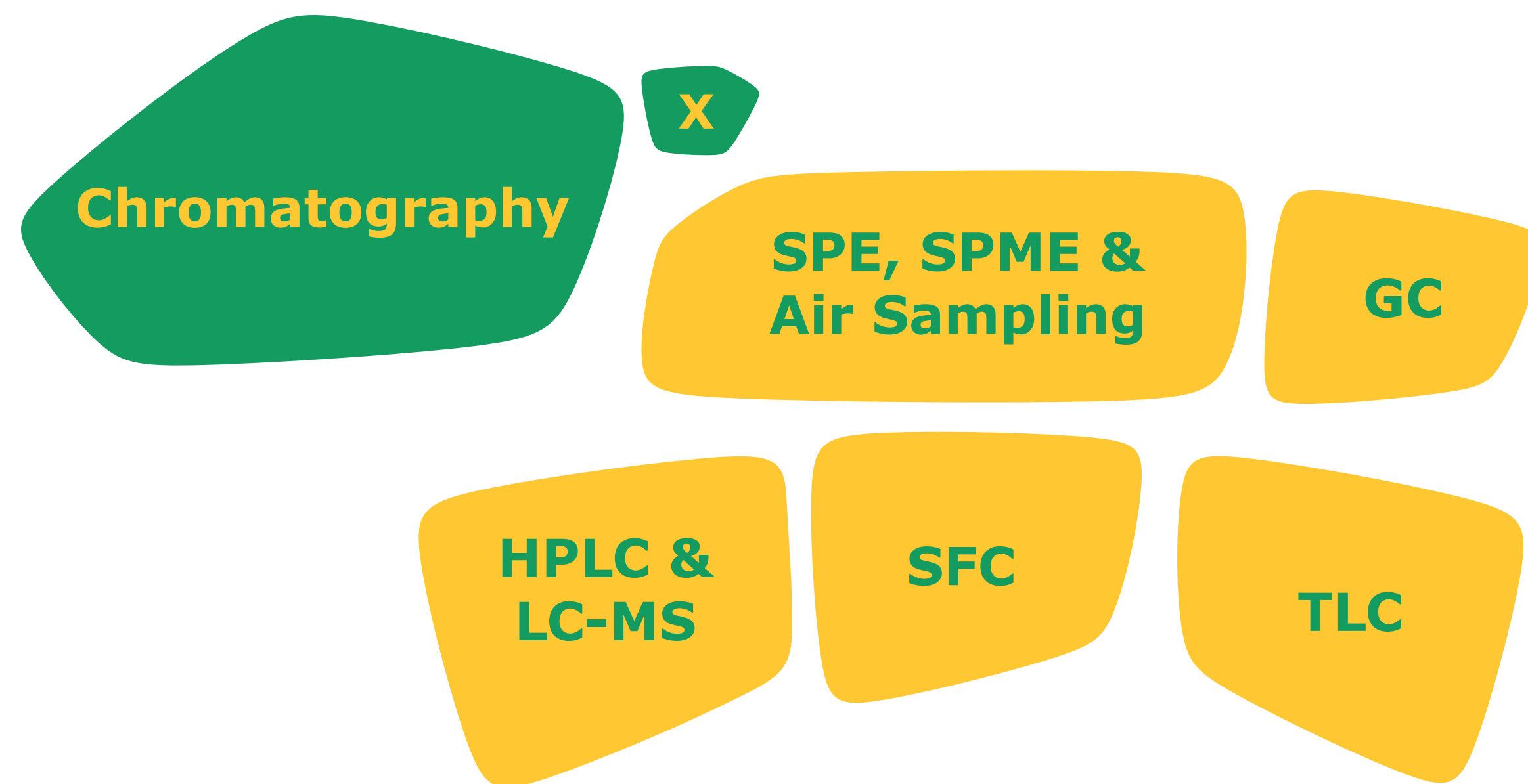
Safety
&
Essentials

Contact Us



Supelco®
Analytical Products

Accuracy.
precision.
consistency.



Sample Preparation

X

We know the negative impact a poorly prepped sample can have on your end results, which is why we have spent a lot of our product innovation focus in our sample preparation portfolio, ensuring accurate data.

SPE

SPME

Air Monitoring



SPE

Solid phase extraction (SPE) is a technique designed for rapid, selective sample preparation and purification prior to chromatographic analysis. Using liquid chromatography principles to control selectivity, SPE provides the sample cleanup, recovery, and concentration necessary for accurate quantitative analysis.

[Read more](#)

Sample Preparation



We know the negative impact a poorly prepped sample can have on your end results, which is why we have spent a lot of our product innovation focus in our sample preparation portfolio, ensuring accurate data.

SPE

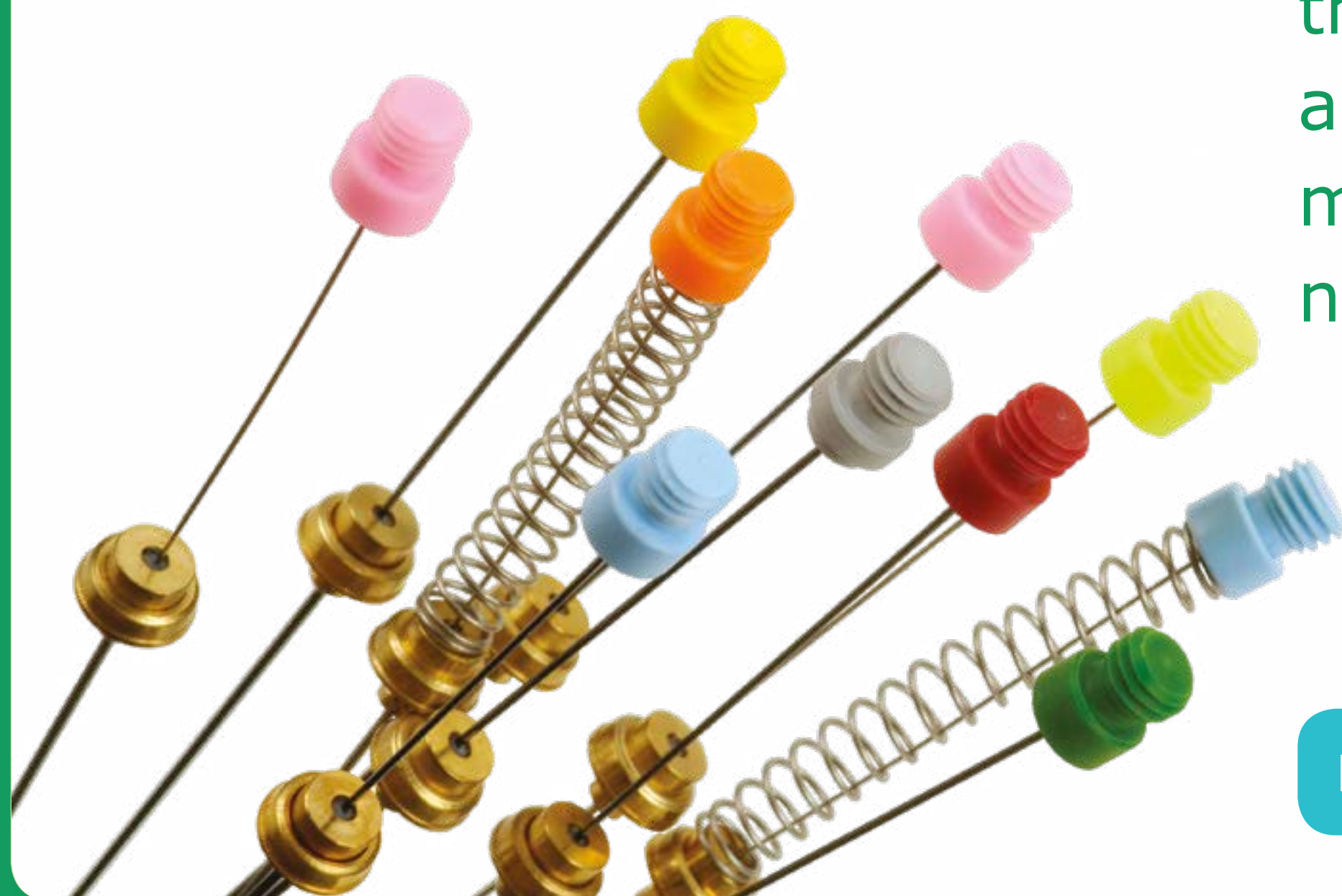
SPME

Air Monitoring

SPME

Solid Phase Microextraction (SPME) is an innovative, solvent-free sample prep technology that is fast, economical, and versatile. SPME has gained widespread acceptance as the technique of preference for many applications, including analysis of flavors, fragrances, environmental or biological matrices, or for forensics, toxicology and product testing, to name a few.

[More on SPME](#)



Sample Preparation

X

We know the negative impact a poorly prepped sample can have on your end results, which is why we have spent a lot of our product innovation focus in our sample preparation portfolio, ensuring accurate data.

SPE

SPME

Air Monitoring

Air Monitoring

The Supelco® portfolio includes sensitive and reliable air sampling for a wide range of applications for solvent desorption, thermal desorption, passive and whole air sampling. Our offering includes a wide range of solutions for sampling carbonyls, isocyanates and other VOCs.



Gas Chromatography

X

Whether you use ECD, FID, TCD, MS or another detector – our comprehensive portfolio of GC columns, solvents, standards & accessories offers a dedicated quality product for your specific application and detection method.

GC-ECD & FID /
GC-MS Solvents

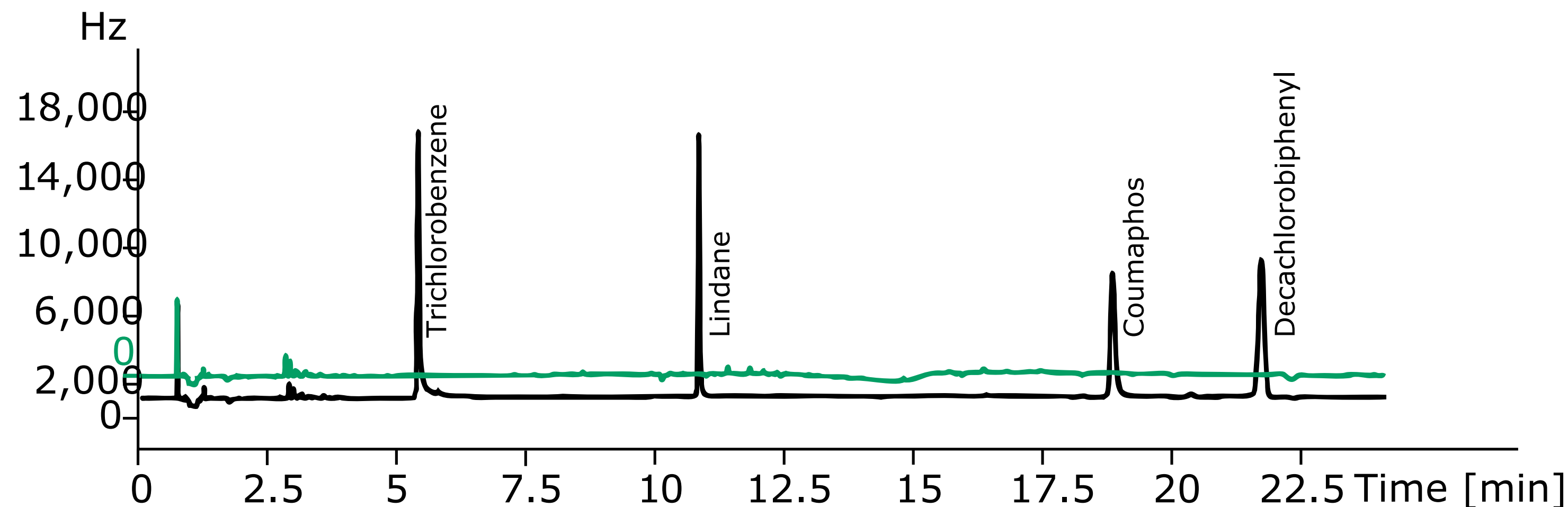
Headspace GC
Solvents

GC Columns

Standards for GC

GC-ECD & FID / GC-MS Solvents

Our GC solvent qualities are ideal for all gas chromatography applications. These solvents are specially developed and tested for ECD, FID and MS detection to ensure a maximum signal-to-noise ratio in the largest specified retention time range.



[Check out what's new!](#)

Gas Chromatography

X

Whether you use ECD, FID, TCD, MS or another detector – our comprehensive portfolio of GC columns, solvents, standards & accessories offers a dedicated quality product for your specific application and detection method.

GC-ECD & FID /
GC-MS Solvents

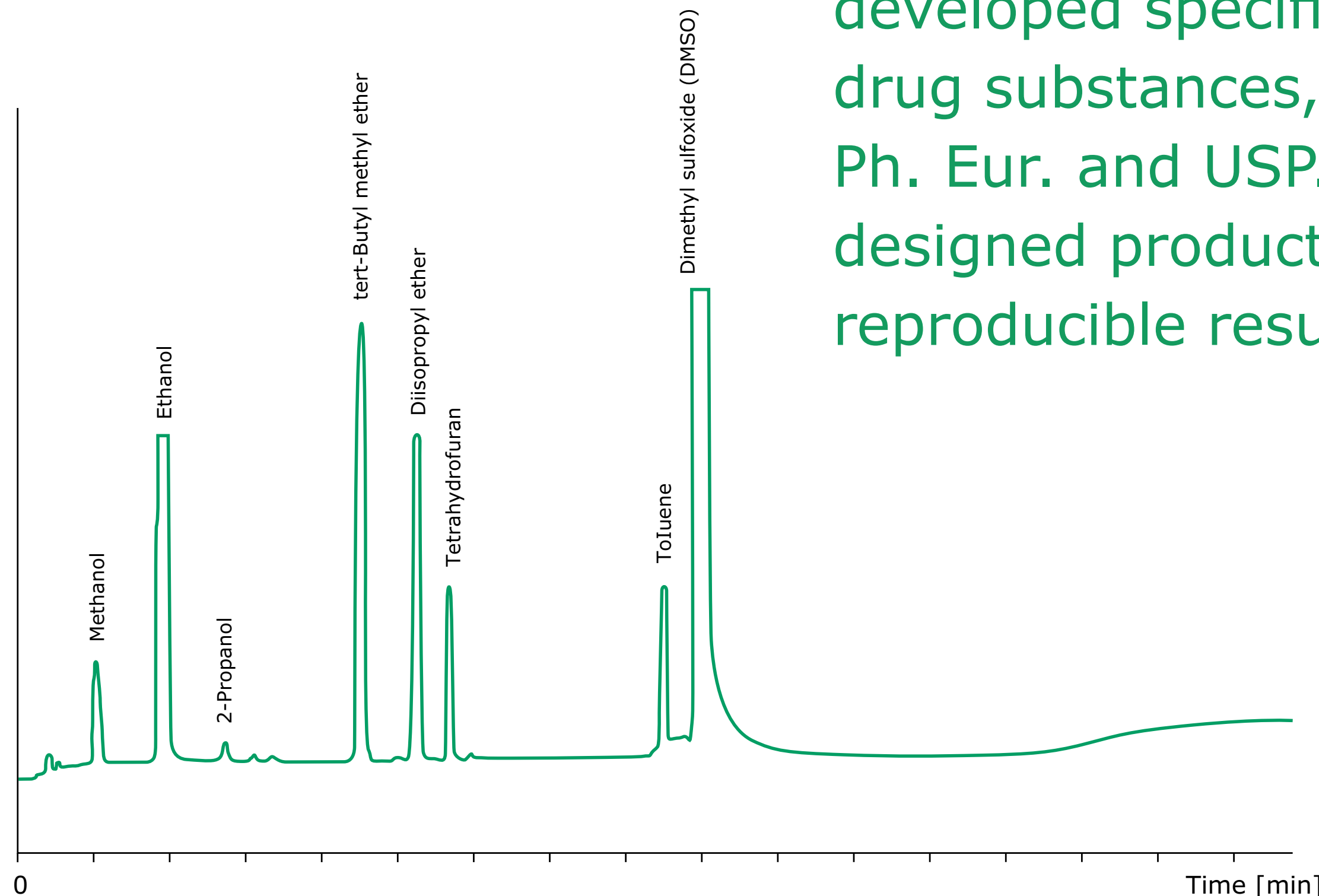
Headspace GC
Solvents

GC Columns

Standards for GC

Headspace GC

Our solvents for headspace gas chromatography are developed specifically for the analysis of residual solvents in drug substances, excipients, and drug products according to Ph. Eur. and USP. Their high purity is provided by specially designed production processes—for accurate, reliable and reproducible results of analysis.



Check out what's new!

Gas Chromatography

X

Whether you use ECD, FID, TCD, MS or another detector – our comprehensive portfolio of GC columns, solvents, standards & accessories offers a dedicated quality product for your specific application and detection method.

GC-ECD & FID /
GC-MS Solvents

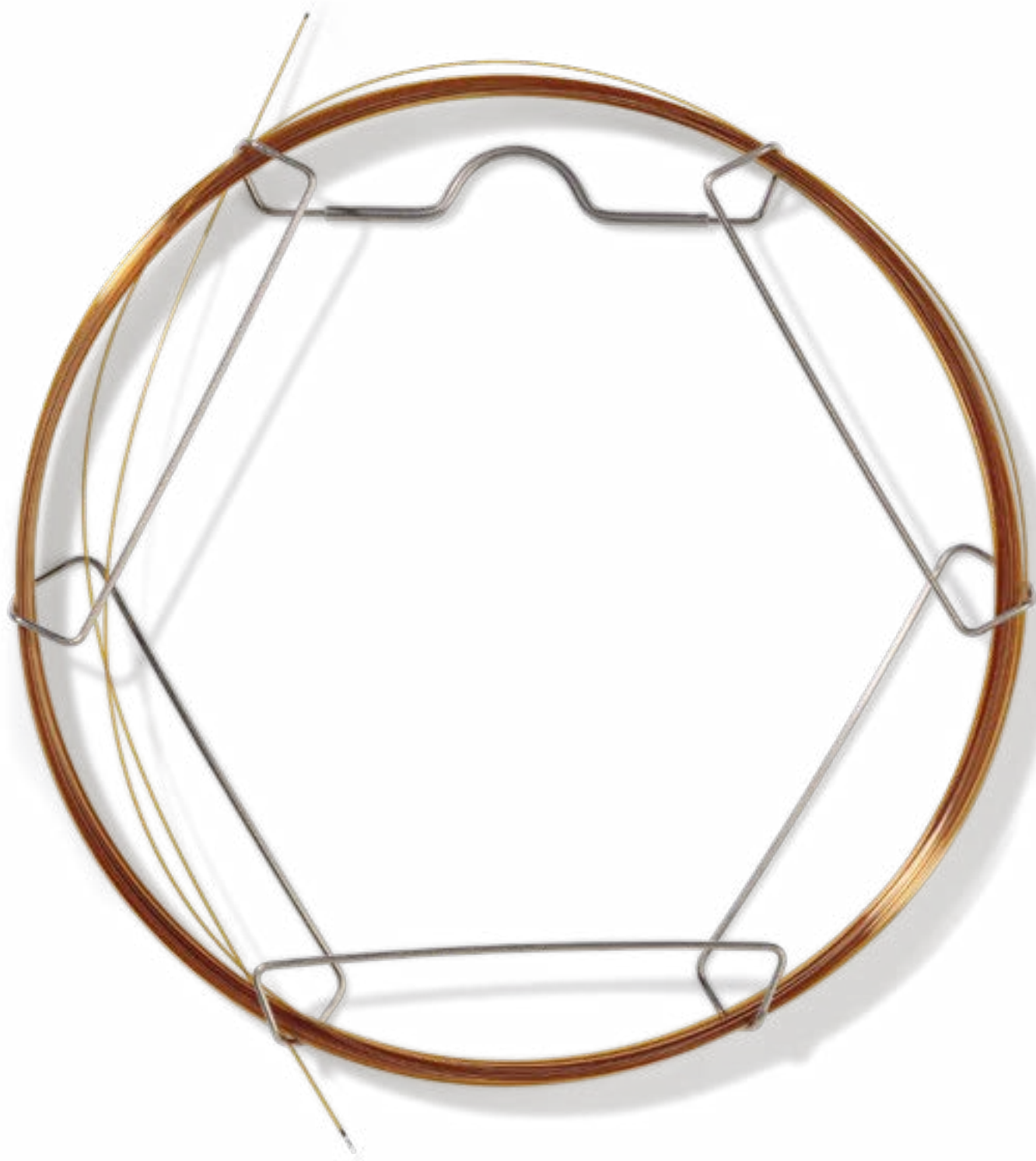
Headspace GC
Solvents

GC Columns

Standards for GC

GC Columns

We are dedicated to the development of cutting edge GC column technology to meet your ever changing needs. Our full line of GC columns, including our innovative ionic liquid, MS-grade, Fast GC, GCxGC, Chiral, SCOT, PLOT and packed columns, provide you the accuracy and consistency you need.



[Discover GC Columns](#)

Gas Chromatography

X

Whether you use ECD, FID, TCD, MS or another detector – our comprehensive portfolio of GC columns, solvents, standards & accessories offers a dedicated quality product for your specific application and detection method.

GC-ECD & FID /
GC-MS Solvents

Headspace GC
Solvents

GC Columns

Standards for GC

Standards for GC

We offer the most comprehensive portfolio of standards and Certified Reference Materials for gas chromatography methods. Our products ensure accurate and reliable results while supporting laboratory regulatory requirements for analytical testing applications in:

- Air Monitoring Standards
- Certified Reference Material for Chromatography
- Clinical Standards)
- Colors
- Column & Instrument Performance Test Mixes
- Environmental Standards
- Food & Beverage Standards
- Forensic and Veterinary Standards
- Gas Calibration Standards
- Petrochemical Standards
- Ion Chromatography Standards
- Life Sciences Standards
- Pharmaceutical and Drug Standards
- Polymer Standards
- Standards Accessories
- Standards for Personal Care and Cosmetic Products
- Standards for SupelMIP SPE



Results are only as accurate as your reference

HPLC & LC-MS

X

HPLC, UHPLC and LC-MS techniques require high-performance columns, solvents and reagents for accurate and consistent results.

HPLC Solvents

HPLC Reagents

HPLC Columns

LC-MS Solvents

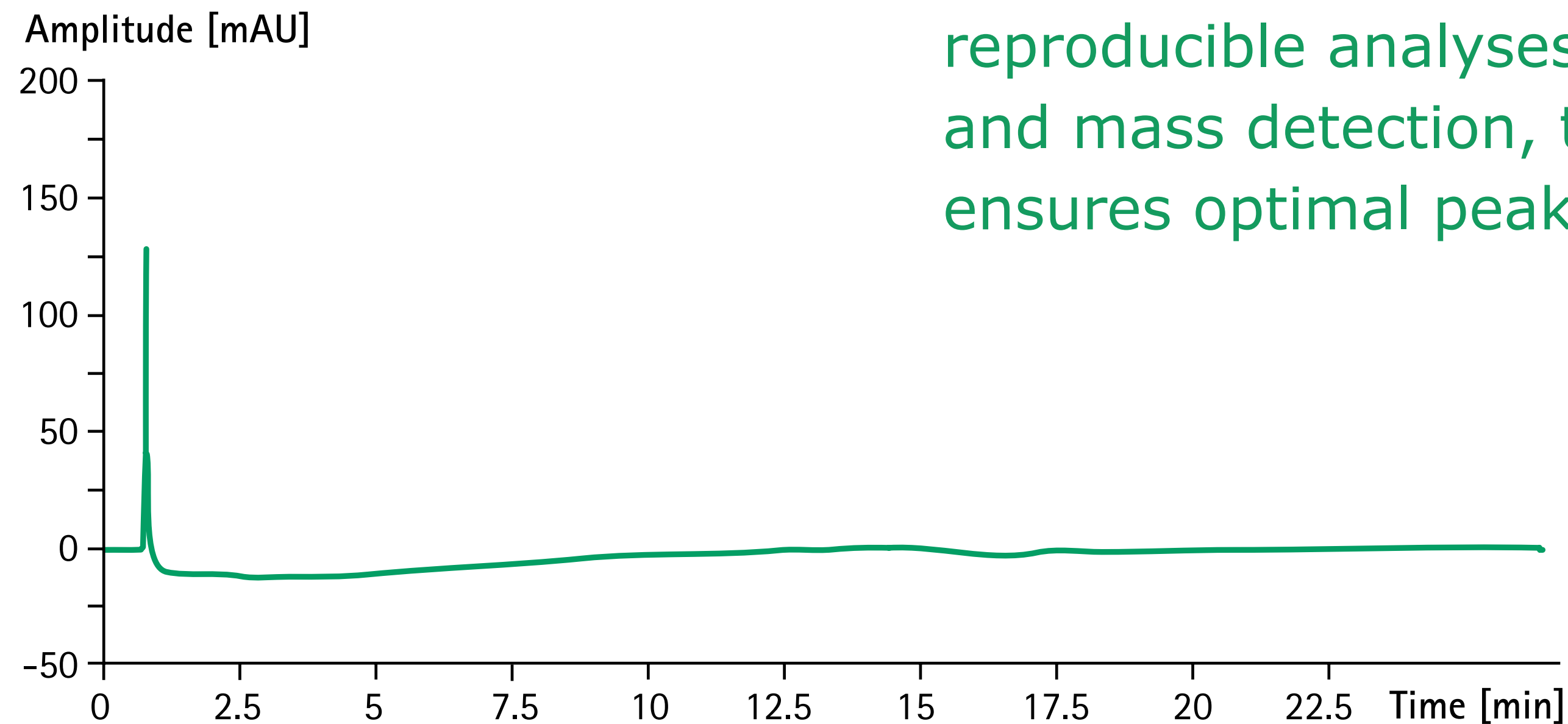
LC-MS Reagents

LC-MS Columns

HPLC Solvents

With their high degree of UV transmittance, low particle count, low acidity & alkalinity and low evaporation residue level, our HPLC solvents are ideal for highly demanding and reproducible analyses. Suitable for UV, fluorescence and mass detection, the overall interference-free baseline ensures optimal peak separation.

HPLC grade solvents



HPLC & LC-MS

X

HPLC, UHPLC and LC-MS techniques require high-performance columns, solvents and reagents for accurate and consistent results.

HPLC Solvents

HPLC Reagents

HPLC Columns

LC-MS Solvents

LC-MS Reagents

LC-MS Columns

HPLC Reagents

Our LiChropur® reagents are ideal for HPLC analysis. These reagents are tested for inorganic impurities, including Al, Ca, Cu, Fe, K, Mg and Na.

- QC is performed using an HPLC suitability gradient test at 220, 254 and 280 nm
- Filled under clean room conditions
- Extensive impurity profile of the product on the Certificate of Analysis



[Discover HPLC reagents](#)

HPLC & LC-MS

X

HPLC, UHPLC and LC-MS techniques require high-performance columns, solvents and reagents for accurate and consistent results.

HPLC Solvents

HPLC Reagents

HPLC Columns

LC-MS Solvents

LC-MS Reagents

LC-MS Columns



HPLC Columns

We have a tradition of providing innovative HPLC columns that work with all instrumentation which are tailored to your individual application needs. We offer a wide selection of high performance liquid chromatography (HPLC, UHPLC, and LC-MS) columns for small and large molecule (biomolecule) analysis, including those employing totally porous particles, superficially porous particles and monolithic columns.

[Discover HPLC Columns](#)

HPLC & LC-MS

X

HPLC, UHPLC and LC-MS techniques require high-performance columns, solvents and reagents for accurate and consistent results.

HPLC Solvents

HPLC Reagents

HPLC Columns

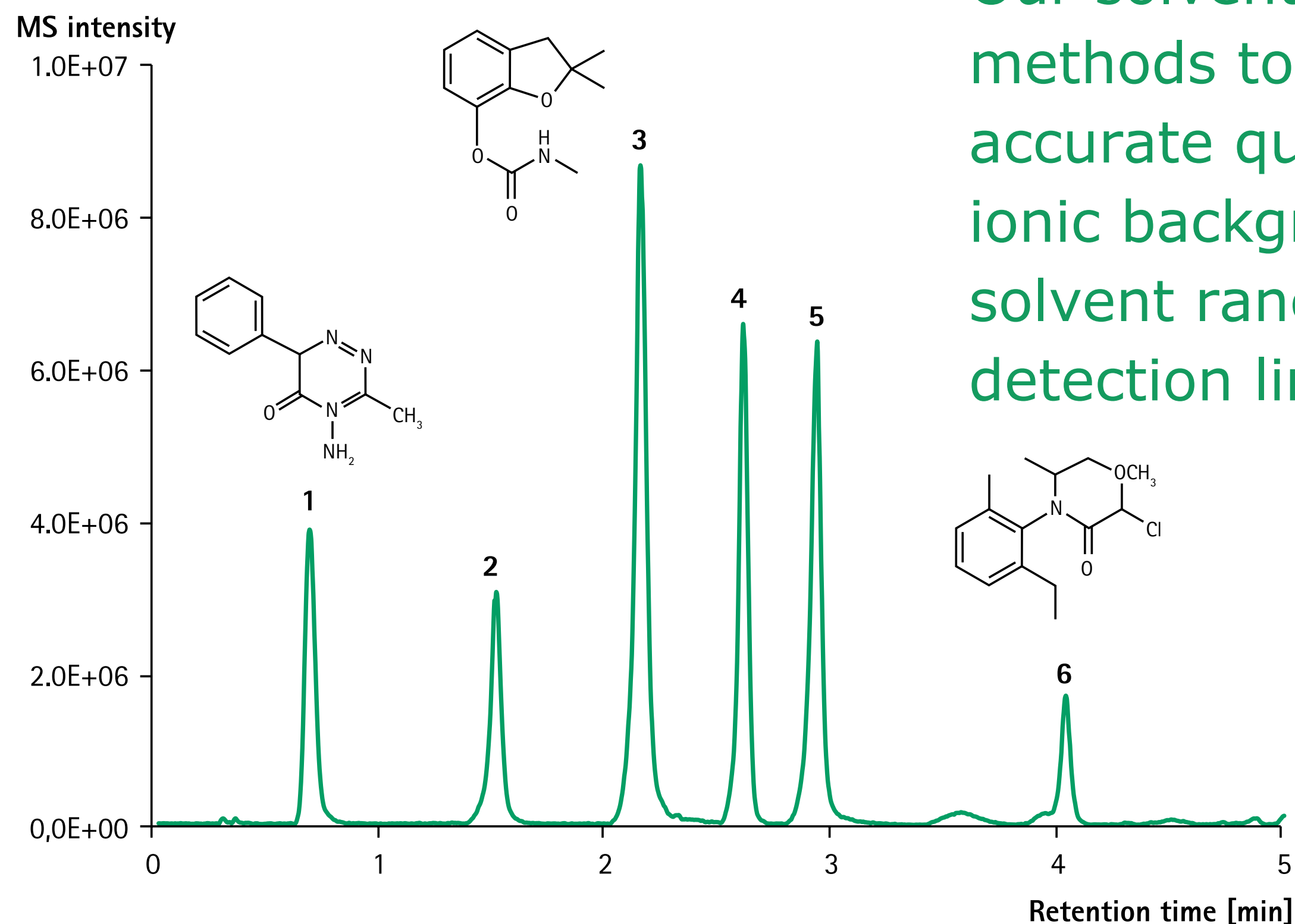
LC-MS Solvents

LC-MS Reagents

LC-MS Columns

LC-MS Solvents

Our solvents meet all stringent requirements of LC-MS methods to provide the highest resolution and sensitivity for accurate quantitative results. Thanks to the low level of ionic background and ion suppression, our high quality solvent range ensures high ionization efficiency and improved detection limits.



LC-MS Solvents

New UHPLC-MS Grade Lichrosolv® Solvents

HPLC & LC-MS

X

HPLC, UHPLC and LC-MS techniques require high-performance columns, solvents and reagents for accurate and consistent results.

HPLC Solvents

HPLC Reagents

HPLC Columns

LC-MS Solvents

LC-MS Reagents

LC-MS Columns

LC-MS Reagents

We offer LiChropur® products specific for LC-MS analysis. These reagents are tested for inorganic impurities, including Al, Ca, Cu, Fe, K, Mg and Na.

- QC performed using a standard Reserpine test
- Filled under clean room conditions
- Extensive impurity profile of the product on the Certificate of Analysis
- Ensuring most reliable performance of your application



[Discover LC-MS reagents](#)

HPLC & LC-MS

X

HPLC, UHPLC and LC-MS techniques require high-performance columns, solvents and reagents for accurate and consistent results.

HPLC Solvents

HPLC Reagents

HPLC Columns

LC-MS Solvents

LC-MS Reagents

LC-MS Columns

LC-MS Columns

Our selection of columns are exclusively designed for LC-MS/MS and LC-MS-NMR, needs meeting the critical demand for the purity required in analysis of drugs, biomolecule separation and analytical assays.



[Discover LC-MS Columns](#)

Supercritical Fluid Chromatography



We offer a broad range of SFC column chemistries for both chiral and achiral separations, from analytical to preparative scale

SFC



SFC

Supercritical fluid chromatography (SFC) is a chromatographic technique that uses a supercritical fluid such as carbon dioxide as the mobile phase. Typical applications are similar to normal phase HPLC, but with the benefit of not using high volumes of organic solvents. SFC is popular for preparative separations, especially chiral separations, because it is easy to remove the mobile phase via simple evaporation.

[Discover chiral SFC](#)

TLC

X

Thin-layer chromatography (TLC) is an easy-to-use, fast and highly versatile separation technique for qualitative and quantitative analysis perfectly suited for rapid identification of ingredients, screening and monitoring of many compounds.

Qualitative TLC

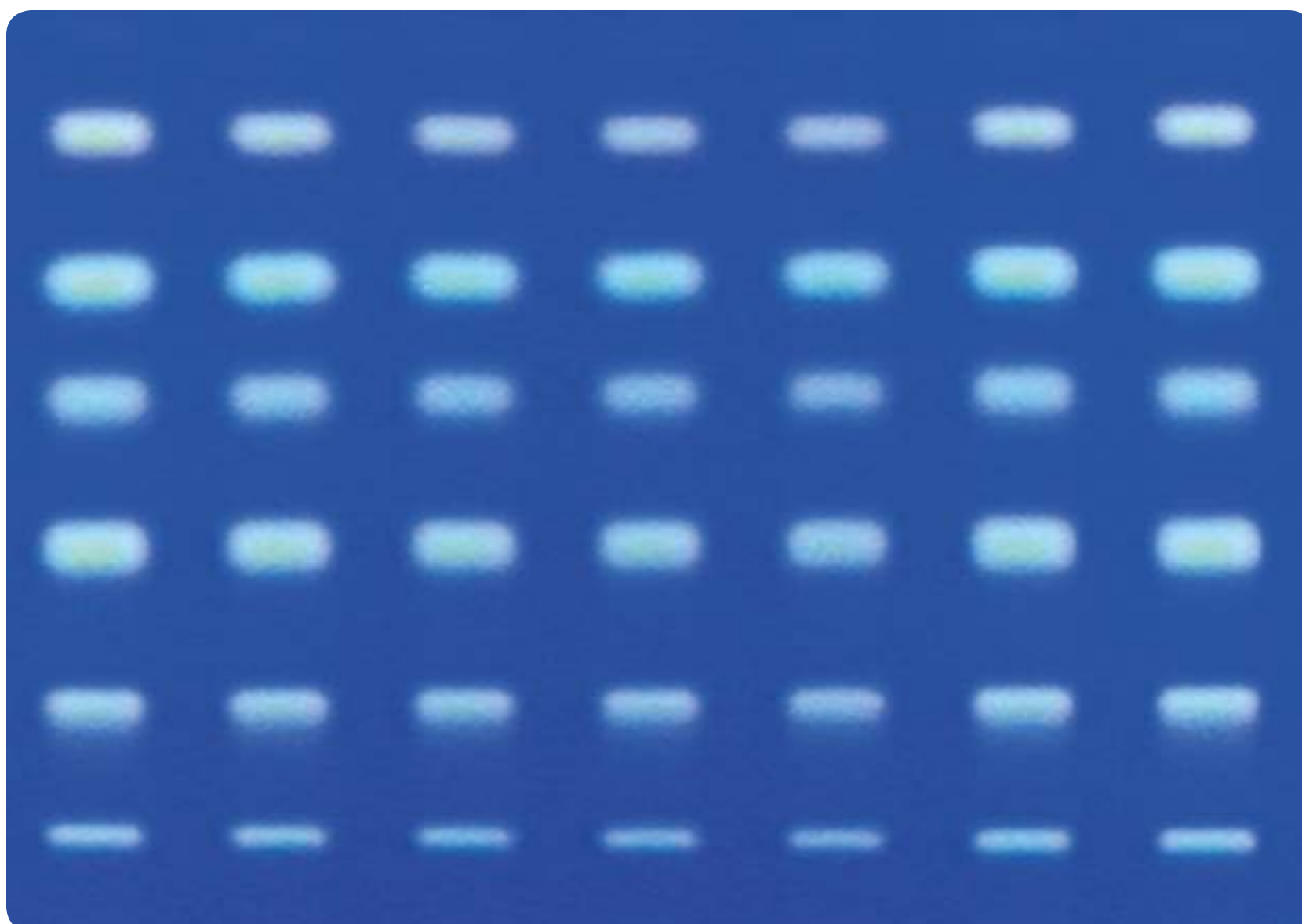
Quantitative
HPTLC

TLC with MS
Coupling

Preparative TLC

Qualitative TLC

Classical silica TLC plates enable the analysis of a broad range of compounds and cover almost 80% of applications for adsorption and partition thin-layer chromatography.



[Discover our classical TLC Plates](#)

TLC

X

Thin-layer chromatography (TLC) is an easy-to-use, fast and highly versatile separation technique for qualitative and quantitative analysis perfectly suited for rapid identification of ingredients, screening and monitoring of many compounds.

Qualitative TLC

Quantitative
HPTLC

TLC with MS
Coupling

Preparative TLC

Quantitative HPTLC

As the leading supplier of thin-layer chromatography (TLC) consumables, we offer an extensive portfolio for TLC preparative TLC, and high performance TLC (HPTLC). HPTLC plates from our Supelco® Portfolio are the perfect choice for quantitative separation using instrumental HPTLC. The optimized, smaller particles enable a significantly higher speed, more efficiency and better sensitivity than classical TLC plates.

[Discover HPTLC Plates](#)

TLC

X

Thin-layer chromatography (TLC) is an easy-to-use, fast and highly versatile separation technique for qualitative and quantitative analysis perfectly suited for rapid identification of ingredients, screening and monitoring of many compounds.

Qualitative TLC

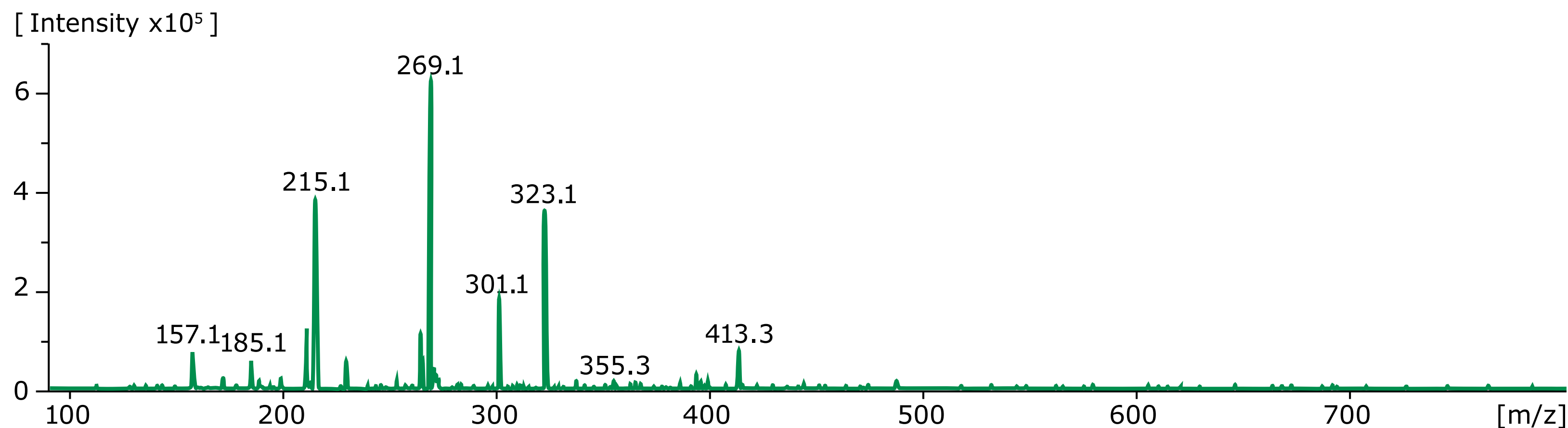
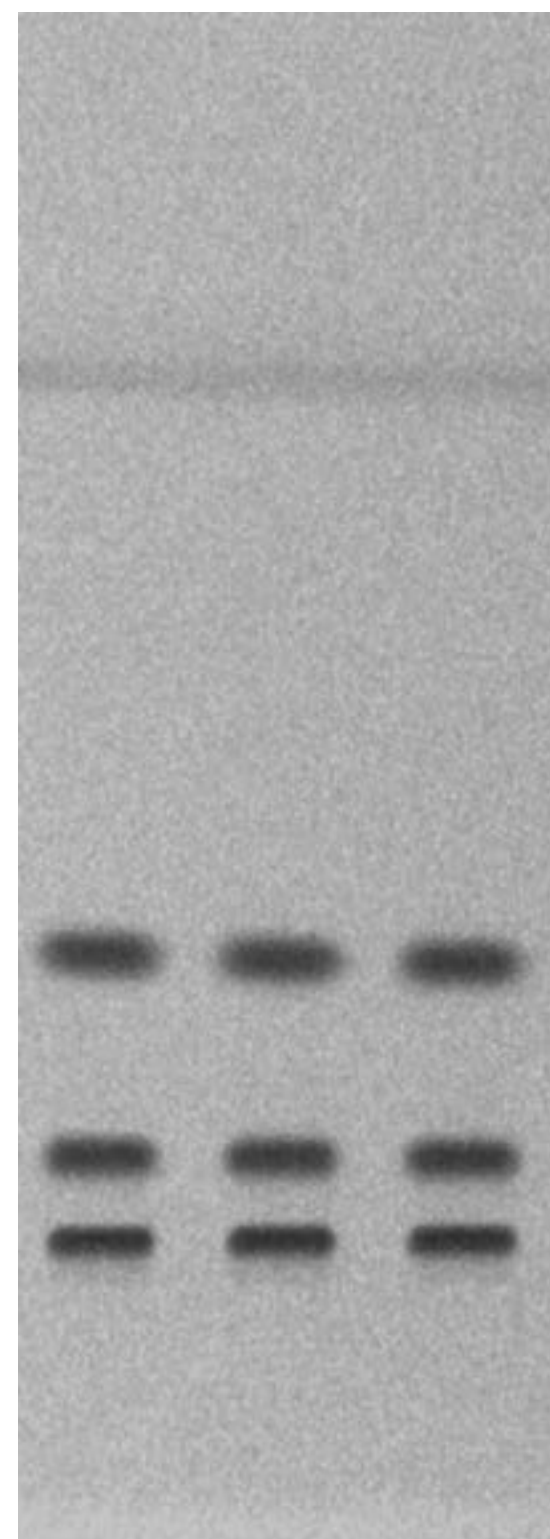
Quantitative
HPTLC

TLC with MS
Coupling

Preparative TLC

TLC with MS Coupling

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



Discover MS-grade TLC (and HPTLC plates)

TLC

X

Thin-layer chromatography (TLC) is an easy-to-use, fast and highly versatile separation technique for qualitative and quantitative analysis perfectly suited for rapid identification of ingredients, screening and monitoring of many compounds.

Qualitative TLC

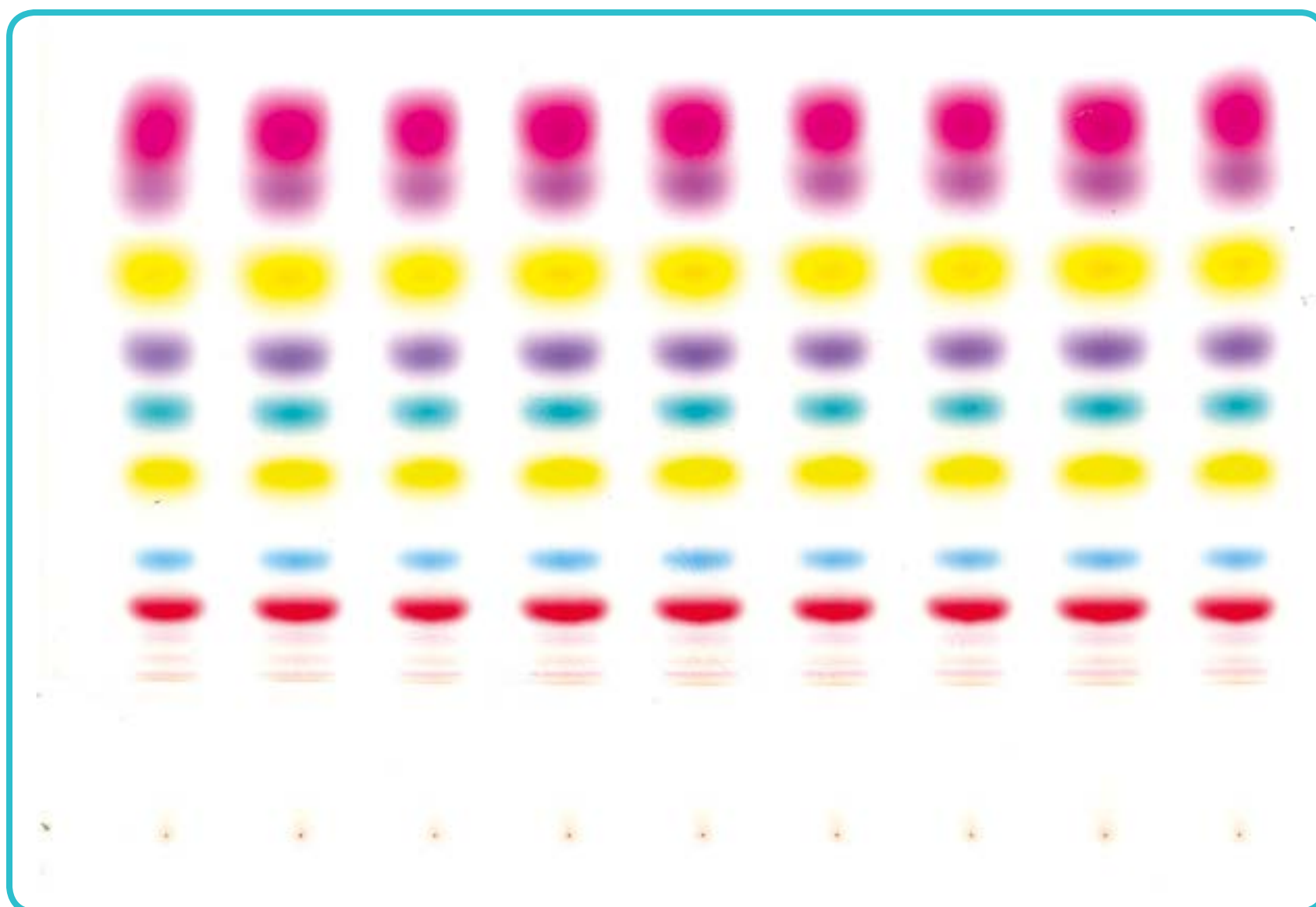
Quantitative
HPTLC

TLC with MS
Coupling

Preparative TLC

Preparative TLC

Our preparative layer (PLC) plates allow separation and purification of samples varying in quantity—from milligrams to grams.



Discover PLC Plates

**Accuracy.
precision.
consistency.**

**Spectroscopy &
Spectrometry**

X

**Molecular
Spectroscopy**

**Atomic
Spectroscopy**

**Mass
Spectrometry**



Supelco®
Analytical Products

Molecular Spectroscopy



We provide a full range of instrumentation, solvents, reagents and standards for molecular spectroscopy methods including NMR, IR, UV/Vis photometry, colorimetry and reflectometry.

NMR

IR

UV/Vis
Photometry

Colorimetry

Reflectometry

NMR

We offer a large range of NIST traceable certified reference materials for use as internal standards in quantitative NMR studies.



Standards for NMR

Molecular Spectroscopy



We provide a full range of instrumentation, solvents, reagents and standards for molecular spectroscopy methods including NMR, IR, UV/Vis photometry, colorimetry and reflectometry.

NMR

IR

UV/Vis
Photometry

Colorimetry

Reflectometry

IR

Identify unknown materials and conduct contaminant analysis. Discover our calibration standards for infrared spectroscopy.



- Amino Acids, Peptides & Proteins
- Biomarkers & Metabolomics
- Carbohydrates
- Elemental, Ions & Water (KF)
- Food & Cosmetic Components
- Lipids & Fatty Acids
- Matrix Materials
- Organic Pollutants
- Pesticides
- Petrochemicals
- Pharmaceuticals, Illicit Drugs & Alcohol
- Physical Properties
- Phytochemicals
- Proficiency Testing
- Vitamins
- Additional Standards

Molecular Spectroscopy

X

We provide a full range of instrumentation, solvents, reagents and standards for molecular spectroscopy methods including NMR, IR, UV/Vis photometry, colorimetry and reflectometry.

NMR

IR

UV/Vis
Photometry

Colorimetry

Reflectometry

UV/Vis Photometry

Our spectrophotometers are ideal for water, food & environmental analysis. All instruments in the Spectroquant® Prove family are conveniently preprogrammed for use with our extensive range of Spectroquant® tests and test kits to provide simplicity, security, and durability.



Just Prove it!

Molecular Spectroscopy

X

We provide a full range of instrumentation, solvents, reagents and standards for molecular spectroscopy methods including NMR, IR, UV/Vis photometry, colorimetry and reflectometry.

NMR

IR

UV/Vis
Photometry

Colorimetry

Reflectometry

Colorimetry

For water or disinfection analysis in the field, our handheld Spectroquant® Move colorimeter is robust and portable for rapid on-site analyses with reliable results.



Move over here!

Molecular Spectroscopy

X

We provide a full range of instrumentation, solvents, reagents and standards for molecular spectroscopy methods including NMR, IR, UV/Vis photometry, colorimetry and reflectometry.

NMR

IR

UV/Vis
Photometry

Colorimetry

Reflectometry

Reflectometry

The Reflectoquant[®] system is an economical mobile laboratory to perform critical analyses in the fields of agriculture, food, beverages, or water analysis, as well as during disinfection control. A broad range of Reflectoquant[®] test strips and applications allows you to analyze over 20 different parameters in various fields of application, and the bar-code system provides all the calibration information you need in a regulated setting.



Mobile accuracy!

Atomic Spectroscopy



The Supelco® analytical products portfolio from Merck offers a comprehensive range tailored for atomic absorption spectroscopy and inductively coupled plasma analysis.

**AAS & ICP
Analysis**

Auxiliaries for AAS

Auxiliaries for ICP



AAS & ICP Analysis

For accredited testing labs, the use of reliable and traceable Certified Reference Materials (CRMs) for calibration is demanded by ISO/IEC 17025.

- Tested and manufactured under ISO/IEC 17025 & ISO/IEC 17034 double accreditation
- Directly traceable to primary reference material from NIST
- Full Certificate of Analysis

The recommended reagents for sensitive and reliable trace analysis are Suprapur® and Ultrapur acids.

Standards for ICP & AAS

Atomic Spectroscopy



The Supelco® analytical products portfolio from Merck offers a comprehensive range tailored for atomic absorption spectroscopy and inductively coupled plasma analysis.

**AAS & ICP
Analysis**

Auxiliaries for AAS

Auxiliaries for ICP



Auxiliaries for AAS

For Atomic Absorption Spectroscopy (AAS) analysis, we offer reagents for both sample preparation and calibration. Our portfolio of auxiliary reagents for optimizing analysis conditions comprises selected matrix modifiers and spectroscopic buffers to reduce interference for AAS measurement.

- Matrix modifiers for Graphite Furnace AAS (GF-AAS)
- High-purity spectroscopic buffers for Flame AAS (F-AAS)

The recommended reagents for sensitive and reliable trace analysis are Suprapur® and Ultrapur acids.

Atomic Spectroscopy

X

The Supelco® analytical products portfolio from Merck offers a comprehensive range tailored for atomic absorption spectroscopy and inductively coupled plasma analysis.

AAS & ICP
Analysis

Auxiliaries for AAS

Auxiliaries for ICP

Auxiliaries for ICP

You want the best performance your ICP can provide, so choose a Glass Expansion™ sample introduction system recognized worldwide for excellent precision, cost effectiveness and reproducibility of results.

We offer accessories and consumables for ICP and ICP-MS that can be used in different instruments from Perkin Elmer, Agilent/Varian, Thermo and others:

- Nebulizers
- Pump tubes
- Torches
- Coils
- Cones



Mass Spectrometry

X

We are committed to providing you with the broadest range of advanced products for MS workflow applications, backed by unrivaled scientific knowledge, customer service and technical service.

Mass Spec
Standards

Mass Spec
Solvents

UHPLC-MS
Solvents

Mass Spec
Reagents

Mass Spec Standards

We offer the most comprehensive portfolio of standards and certified reference materials for your mass spectrometry method validation, calibration or quantification needs. Our products ensure the accuracy and reliability of your results while supporting laboratory regulatory requirements for analytical testing applications:



- Amino Acids, Peptides & Proteins
- Biomarkers & Metabolomics
- Carbohydrates
- Elemental, Ions & Water (KF)
- Food & Cosmetic Components
- Lipids & Fatty Acids
- Matrix Materials
- Organic Pollutants
- Pesticides
- Petrochemicals
- Pharmaceuticals, Illicit Drugs & Alcohol
- Physical Properties
- Phytochemicals
- Proficiency Testing
- Vitamins
- Additional Standards

Mass Spectrometry



We are committed to providing you with the broadest range of advanced products for MS workflow applications, backed by unrivaled scientific knowledge, customer service and technical service.

Mass Spec
Standards

Mass Spec
Solvents

UHPLC-MS
Solvents

Mass Spec
Reagents

Mass Spec Solvents

We offer high purity solvents specifically to meet the stringent requirements of chromatography applications coupled with MS, ensuring high UV transmittance, baseline stability and lowest impurity levels. We have also developed high purity solvents pre-blended with acetic acid (HA), formic acid (FA) or trifluoroacetic acid (TFA) to provide ready-to-use mobile phases for LC-MS.



High Purity Solvents for Mass Spec

Mass Spectrometry

X

We are committed to providing you with the broadest range of advanced products for MS workflow applications, backed by unrivaled scientific knowledge, customer service and technical service.

Mass Spec
Standards

Mass Spec
Solvents

UHPLC-MS
Solvents

Mass Spec
Reagents

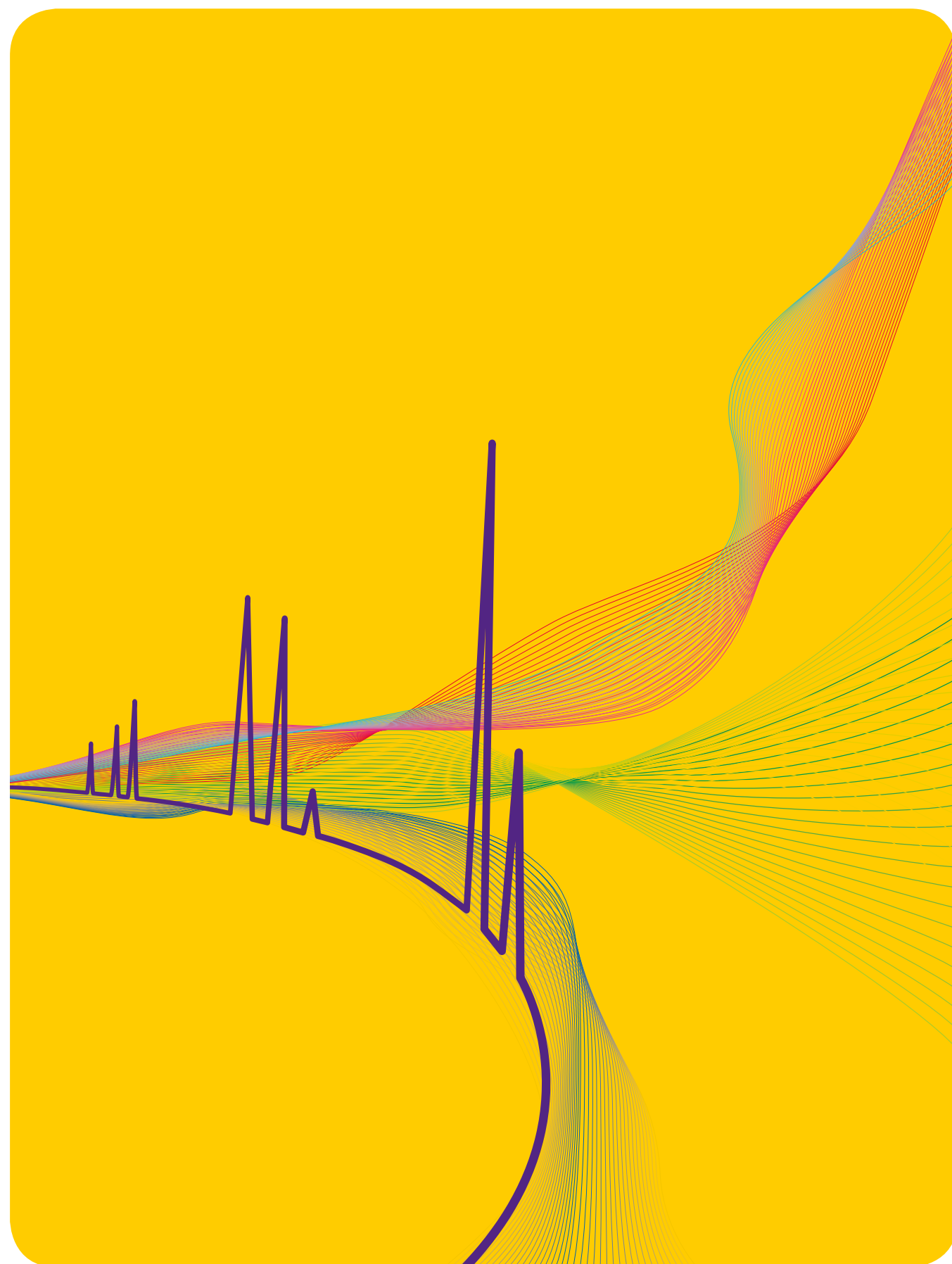
UHPLC-MS Solvents

Our new range of advanced UHPLC-MS LiChrosolv® solvents have been developed to exceed all expectations, ensuring rapid and reliable results in both ESI/APCI positive and negative ionization modes.

Thanks to their lowest level of ionic background and ion suppression, these solvents ensure maximum ionization efficiency to enable high selectivity, resolution and sensitivity.

Brochure

New UHPLC-MS Solvents



Mass Spectrometry

X

We are committed to providing you with the broadest range of advanced products for MS workflow applications, backed by unrivaled scientific knowledge, customer service and technical service.

Mass Spec
Standards

Mass Spec
Solvents

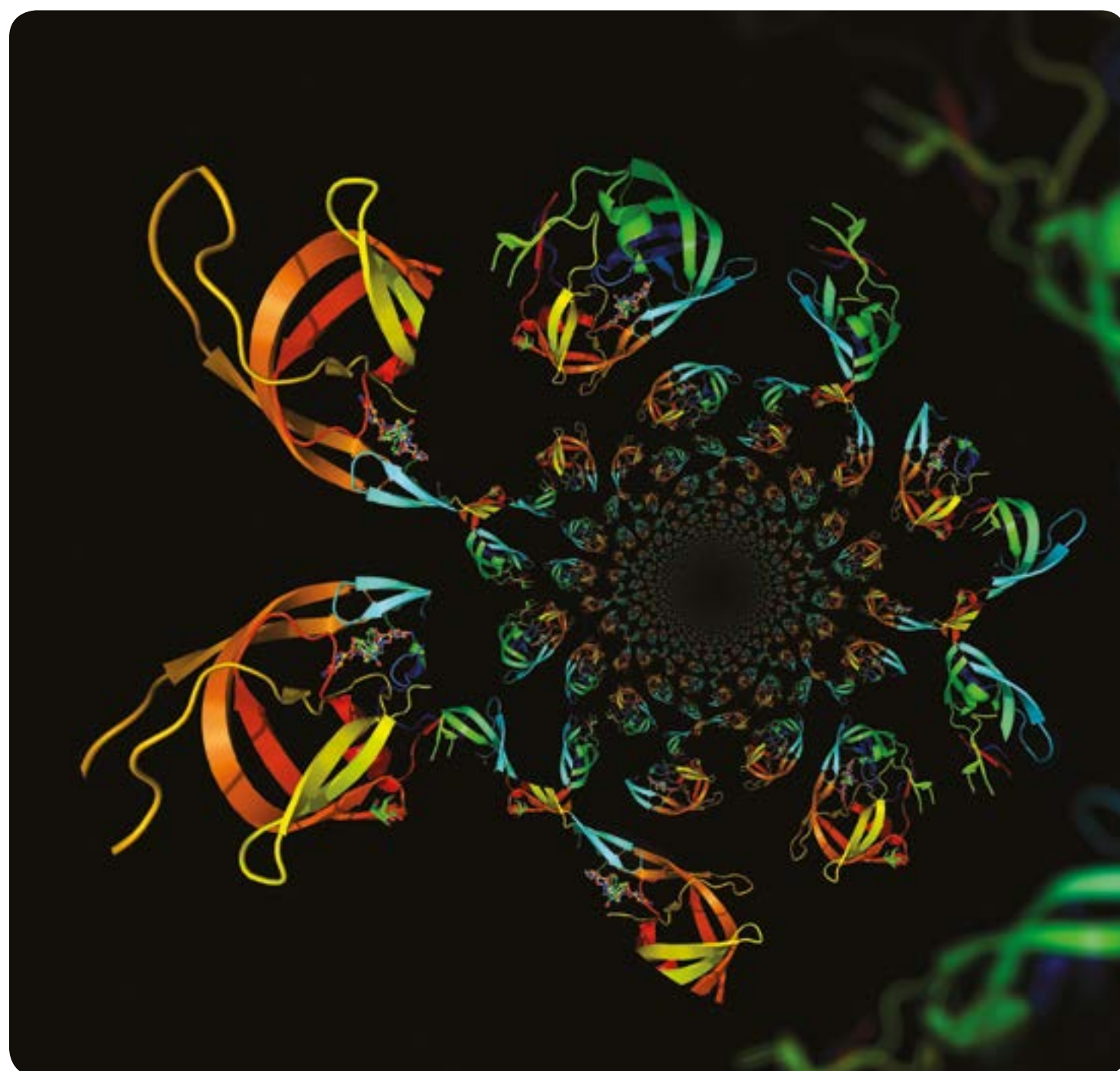
UHPLC-MS
Solvents

Mass Spec
Reagents

Mass Spec Reagents

We offer a wide range of products designed to optimize mass spectrometry results.

- OQ/PV kits
- Micro-Arrays for MS (MAMS)
- Matrix Substances for MALDI-MS
- Reagents for Mass Spectrometry (MS)
- Sciex iChemistry Solutions
- LC-MS Additives & Reagents
- MS Standards
- See also: Mass Spectrometry for protein analysis



**Accuracy.
precision.
consistency.**

**Elemental
Trace**

X

**Quality
Grades**

**ICP & AAS
Analysis**

**XRF
Analysis**

**High Purity
Acids
& Salts**



Supelco®
Analytical Products

Quality Grades

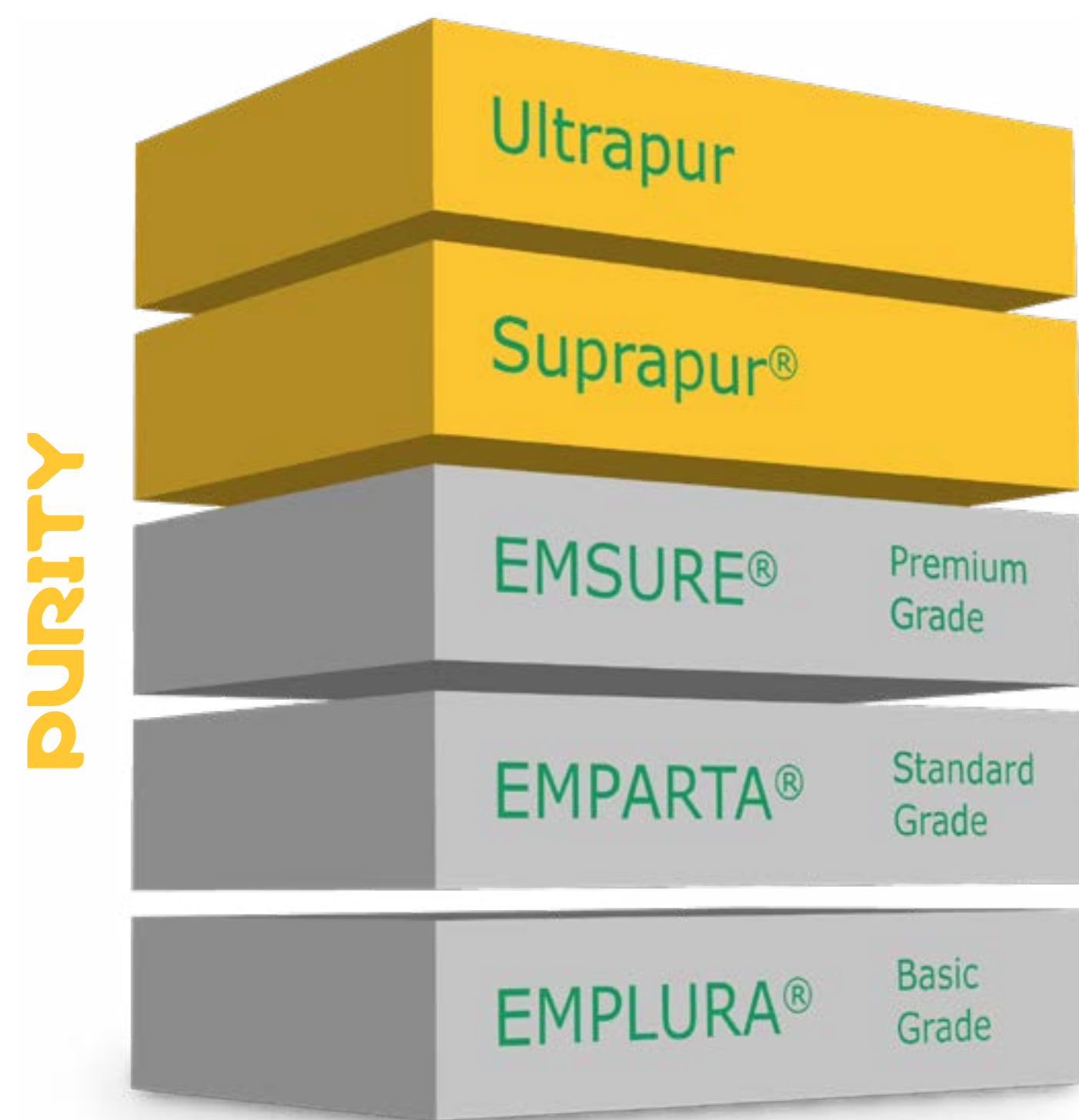
Find the suitable quality grade for the perfect match.



High Purity
Acids

High Purity
Salts

High Purity
Fluxes



High Purity Acids

Ultrapur acids and bases meet the highest demands of ultra-trace analysis in the ppt range. Suprapur[®] acids and bases from the Supelco[®] portfolio brand of Merck are ideal for trace elemental analysis in the ppb range e.g. AAS and ICP.

[Discover Suprapur](#)

Quality Grades

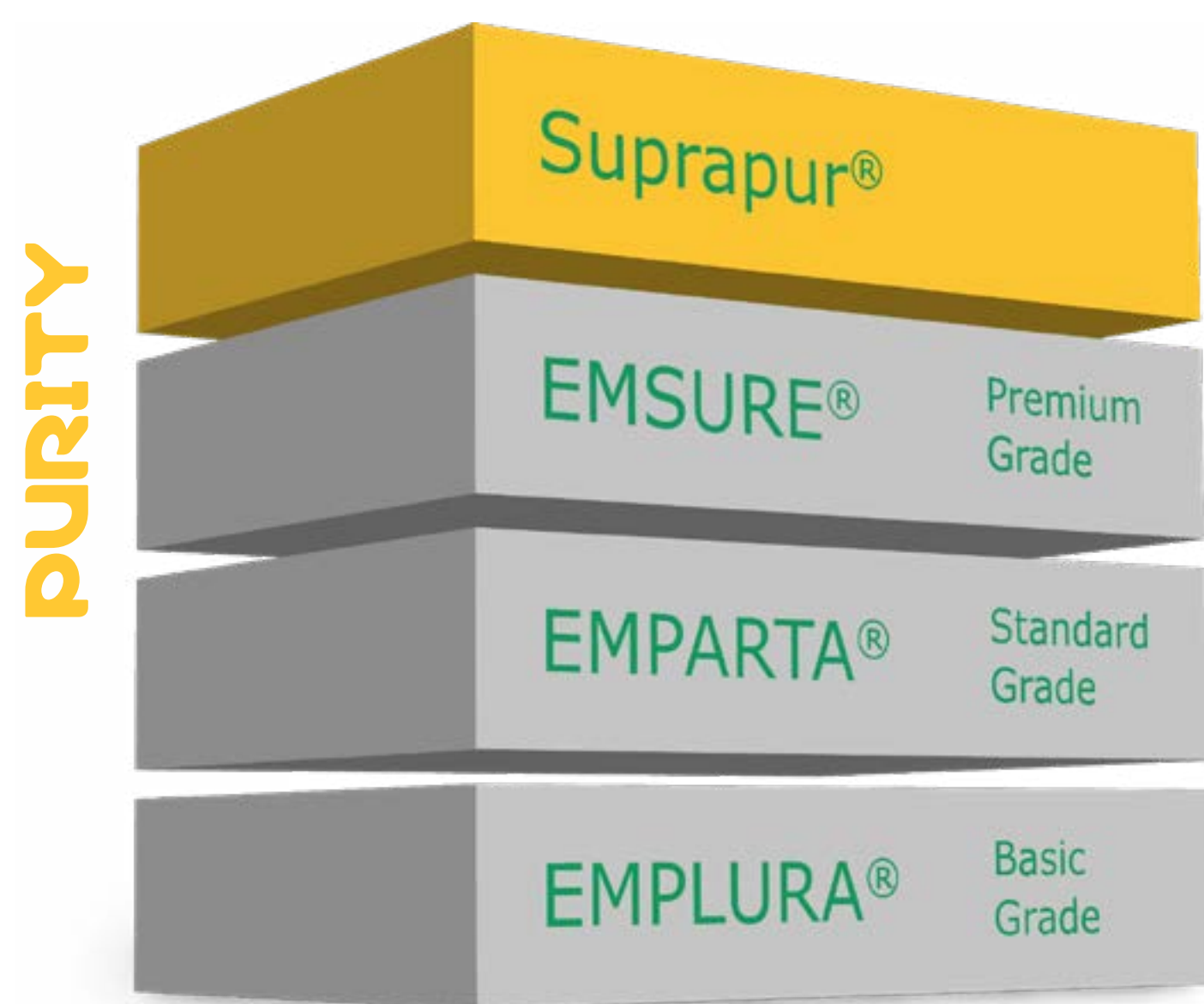
Find the suitable quality grade for the perfect match.



High Purity
Acids

High Purity
Salts

High Purity
Fluxes



High Purity Salts

Suprapur® salts from the Supelco® portfolio brand of Merck, are most suitable for sample preparation in trace elemental analysis. Have confidence in your analytical results.

- High batch-to-batch consistency
- Certificate of Analysis (CoA) with detailed impurity profile

[Discover Suprapur](#)

Quality Grades

Find the suitable quality grade for the perfect match.



High Purity
Acids

High Purity
Salts

High Purity
Fluxes

High Purity Fluxes

Spectromelt® products from the Supelco® portfolio brand of Merck, are high quality reagents for sample preparation in X-ray Fluorescence (XRF) analysis. The elemental impurities are determined and listed in the Certificate of Analysis.

- High purity and batch-to-batch consistency
- Homogeneous samples
- Increases measurement precision



[Discover high purity fluxes](#)

ICP & AAS Analysis

Reagents, certified reference materials, and accessories for highest sensitivity and reliability.

X

ICP standards

Auxiliaries for ICP

Auxiliaries for AAS

AAS standards



ICP standards

For accredited testing labs, the use of reliable and traceable Certified Reference Materials (CRMs) for calibration is demanded by ISO/IEC 17025.

- Tested and manufactured under ISO/IEC 17025 & ISO/IEC 17034 double accreditation
- Directly traceable to primary reference material from NIST
- Full Certificate of Analysis

The recommended reagents for sensitive and reliable trace analysis are Suprapur[®] and Ultrapur acids from the Supelco[®] portfolio brand of Merck.

Standards for ICP & AAS

ICP & AAS Analysis

Reagents, certified reference materials, and accessories for highest sensitivity and reliability.



ICP standards

Auxiliaries for ICP

Auxiliaries for AAS

AAS standards

Auxiliaries for ICP

You want the best performance your ICP can provide, so choose a Glass Expansion™ sample introduction system recognized worldwide for excellent precision, cost effectiveness and reproducibility of results. We offer accessories and consumables for ICP and ICP-MS that can be used in different instruments from Perkin Elmer, Agilent/Varian, Thermo and others.

Have a look at the different categories as

- Nebulizers
- Cones
- Coils
- Torches
- Pump tubes
- etc.



ICP & AAS Analysis

Reagents, certified reference materials, and accessories for highest sensitivity and reliability.



ICP standards

Auxiliaries for ICP

Auxiliaries for AAS

AAS standards

Auxiliaries for AAS

For Atomic Absorption Spectroscopy (AAS) analysis, we offer reagents for both sample preparation and calibration. Our portfolio of auxiliary reagents for optimizing analysis conditions comprises selected matrix modifiers and spectroscopic buffers reduce interference for AAS measurement.

- Matrix modifiers for Graphite Furnace AAS (GF-AAS)
- High-purity spectroscopic buffers for Flame AAS (F-AAS)

The recommended reagents for sensitive and reliable trace analysis are Suprapur® and Ultrapur acids from the Supelco® portfolio brand of Merck.



ICP & AAS Analysis

Reagents, certified reference materials, and accessories for highest sensitivity and reliability.

X

ICP standards

Auxiliaries for ICP

Auxiliaries for AAS

AAS standards

AAS standards

- Digestion Reagents
- Matrix Modifiers (for Graphite Furnace AAS)
- Ionization Buffers (for Flame AAS)
- Reducing Agents (for Hydride AAS)
- Calibration Standards, AAS
- Matrix Standards with Certified Elemental Content
- see also: Proficiency Testing Studies

Standards for ICP & AAS

XRF Analysis



For precise analysis, use our high purity and batch consistent XRF product portfolio for fusion, grinding and tableting.

**Spectromelt®
Reagents**

**Spectromelt®
A + B**

Spectromelt® C

Spectromelt® Reagents

Spectromelt® materials from the Supelco® portfolio brand of Merck for fluxing or pressing of powder tablets for X-ray fluorescence analysis (XRF). The purity of Spectromelt® borates gives the necessary degree of precision and our grinding aid materials are specially developed for automated sample preparation.

- Fluxing agents are available as granulate or fused material
- Spectromelt® reagents for use as grinding and tableting aids
- Spectromelt® tablets can be used for automated sample preparation



Discover Spectromelt® reagents

XRF Analysis

X

For precise analysis, use our high purity and batch consistent XRF product portfolio for fusion, grinding and tableting.

**Spectromelt®
Reagents**

**Spectromelt®
A + B**

Spectromelt® C

Spectromelt® A + B

Spectromelt® A (Lithium) and B (Sodium) borates from the Supelco® portfolio brand of Merck, facilitate very homogeneous samples, precise analyses and a reduced need for instrument adjustments.

- Available as granulated material or as fused particles
- Low loss on ignition
- Also available with integrated non-wetting-agent
- Analyzed for inorganic trace impurities with a high batch-to-batch consistency

Select your fluxes

XRF Analysis



For precise analysis, use our high purity and batch consistent XRF product portfolio for fusion, grinding and tableting.

**Spectromelt®
Reagents**

**Spectromelt®
A + B**

Spectromelt® C

Spectromelt® C

Grinding and tableting the sample is an alternative to fusion. The Spectromelt® C-series from the Supelco® portfolio brand of Merck, is especially developed as a grinding and tableting aid. In automated sample preparation of powder samples speed of analysis is an important factor.

- Spectromelt® C10, C15 and C20 are offered as tablets with a weight of 333 mg each for automated sample preparation
- The new Spectromelt® C15 MP micropowder can be used as a grinding and tableting aid

Select your tableting aid



High Purity Acids & Salts

Detect your analyte, not the reagent impurities.



Suprapur®
Acids, Bases

Ultrapur
Acids

Suprapur®
Salts

Suprapur® Acids, Bases

Suprapur® acids and bases from the Supelco® portfolio brand of Merck, are ideal for sample preparation and production of calibration series in instrumental analysis for the use of trace analysis in the ppm-ppb range.

- Filled under clean room conditions
- Bottles are conditioned before filling
- Different premium packaging materials
- Quality control after filling



Select your Suprapur® acids and bases

High Purity Acids & Salts

Detect your analyte, not the reagent impurities.



Suprapur®
Acids, Bases

Ultrapur
Acids

Suprapur®
Salts

Ultrapur Acids

Ultrapur reagents from the Supelco® portfolio brand of Merck meet the highest demands for ultra-trace instrumental analysis in the ppb to ppt range, because any impurity can compromise measurement accuracy.

- Filled under clean room conditions
- Bottles are conditioned before filling
- Premium packaging materials
- Quality control after filling



Select your Ultrapur acids

High Purity Acids & Salts

Detect your analyte, not the reagent impurities.



**Suprapur®
Acids, Bases**

**Ultrapur
Acids**

**Suprapur®
Salts**

Suprapur® Salts

For instrumental analysis we offer extremely high purity inorganic salts for sample preparation. High purity salts are produced under strict conditions in a clean room area ensuring purity and batch-to-batch consistency of our products.

- Purity 99.99% or up to 99.9999%
- Extensive impurity profile of the product on the Certificate of Analysis
- Suitable for sample preparation for elemental trace analysis

Discover Suprapur®



**Accuracy.
precision.
consistency.**

**Titration &
Karl Fischer**

X

Titration

**Karl
Fischer
Titration**



Supelco®
Analytical Products

Titration

X

Precisely adjusted, high-quality volumetric solutions for dependable titration and analysis.

Titripur® Ready-to-Use Solutions

Packaging

Titripac® Volumetric Solutions

Volumetric Standards

Indicators

3S Technology

Titripur® Volumetric Solutions

Our range of Titripur® volumetric solutions offers outstanding purity, quality and reliability for metal or impurity analysis, assays, or concentration determination. With our first-rate volumetric solutions, you can be sure that your titrations always meet the most rigorous demands.

**Consistently high quality –
and the certification to prove it.**



Discover titration

Titration

X

Precisely adjusted, high-quality volumetric solutions for dependable titration and analysis.

Titripur® Ready-to-Use Solutions

Packaging

Titripac® Volumetric Solutions

Volumetric Standards

Indicators

3S Technology

Packaging

Sophisticated packaging is essential to ensure the highest quality. So we only use glass and plastic grades that do not alter any of the products characteristics during their shelf life in unopened bottles.

Optimized for every application; our volumetric solutions are available in a variety of formats to fit your needs:

- Titrisol® ampoules as concentrates
- Ready-to-use PE and glass bottles & canisters in different pack sizes
- Our unique and sophisticated Titripac® packaging



Discover volumetric solutions

Titration

Precisely adjusted, high-quality volumetric solutions for dependable titration and analysis.

X

Titripur® Ready-to-Use Solutions

Packaging

Titripac® Volumetric Solutions

Volumetric Standards

Indicators

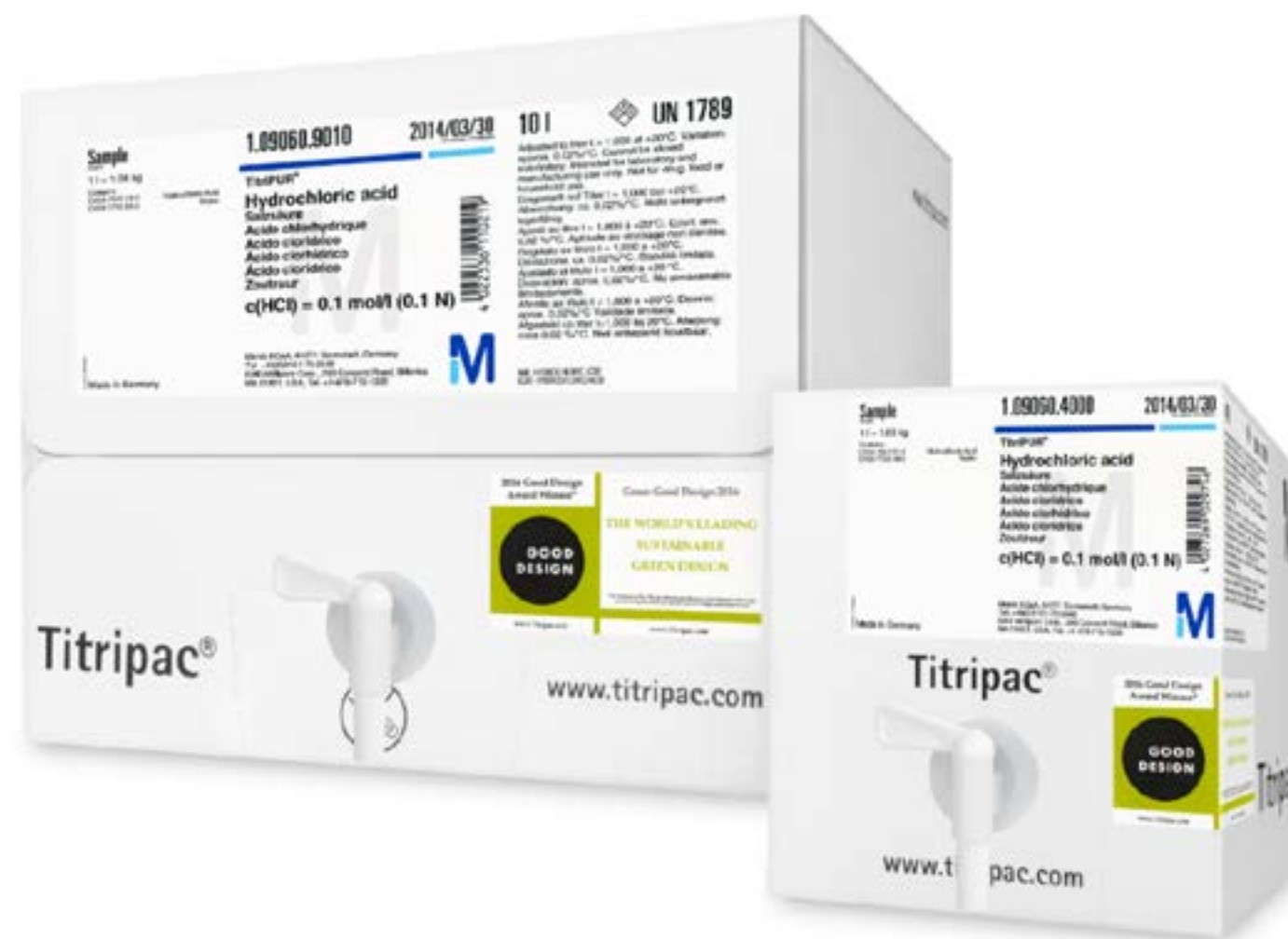
3S Technology

Titripac® Volumetric Solutions

Our innovative packaging solution that saves time, money, and protects the environment is also winner of the Green Good Design Award 2016.

Designed to make titration more reliable and less wasteful, solutions can be used from the first to the last drop.

- No contamination – hermetically sealed
- Reduction of titer determinations
- Easy-to-use with integrated withdrawal tap
- Environmentally friendly disposal



Discover Titripac® volumetric solutions

Titration

X

Precisely adjusted, high-quality volumetric solutions for dependable titration and analysis.

Titripur® Ready-to-Use Solutions

Packaging

Titripac® Volumetric Solutions

Volumetric Standards

Indicators

3S Technology

Volumetric Standards

Certipur® volumetric standards are reliable and certified reference materials which ensure accurate titration results.

- Directly traceable to primary standard reference materials from the NIST (National Institute of Standards and Technology, USA)
- Qualified in our DIN EN ISO /IEC 17025 accredited laboratory
- Reference Material according to ISO Guide 34



Discover volumetric standards

Titration

Precisely adjusted, high-quality volumetric solutions for dependable titration and analysis.

X

Titripur® Ready-to-Use Solutions

Packaging

Titripac® Volumetric Solutions

Volumetric Standards

Indicators

3S Technology



Indicators

For manual titration, indicators show the endpoint of the titration through easily recognizable visual changes such as color change, clouding or fluorescence. Tailored to the exact requirements of your applications, we offer a wide range of high quality indicators:

- Acid-Alkali (pH) indicators
- Complex or metal indicators
- Fluorescence indicators
- Redox indicators
- Special application indicators

[Discover our indicators](#)

Titration

Precisely adjusted, high-quality volumetric solutions for dependable titration and analysis.

X

Titripur® Ready-to-Use Solutions

Packaging

Titripac® Volumetric Solutions

Volumetric Standards

Indicators

3S Technology

3S Reagents for Volumetric Titration

Wet chemical analysis made safer and more reliable by 3S adapter technology: **Safe, Smart, Secure**

- intelligent packaging protected with originality seal
- automated transfer of reagent data via RFID
- compatible with Metrohm OMNIS titration platform



Karl Fischer Titration

X

Accurate, reliable, and fast moisture content determination gained from over 40 years of experience in Karl Fischer titration.

**Aquastar®
Reagents**

**Applications
& Support**

Volumetry

Coulometry

**Water
Standards**

Aquastar® Reagents

Aquastar® Karl Fischer reagents – the standard for reproducible results.

Our Aquastar® reagents & standards are distinguished by their excellent quality. From the selection of raw materials & packaging to our stringent production processes and quality control, we apply the strictest standards to supply you with reliable and consistent Karl Fischer reagents.



Discover Aquastar® reagents

Karl Fischer Titration



Accurate, reliable, and fast moisture content determination gained from over 40 years of experience in Karl Fischer titration.

**Aquastar®
Reagents**

**Applications
& Support**

Volumetry

Coulometry

**Water
Standards**



Applications & Support

Need help finding the right method for your application?
Benefit from our experience and download a personal
copy from more than 500 Karl Fischer applications.

For individual support please contact your local VWR contact or go to
vwr.com/merck

Karl Fischer Titration

X

Accurate, reliable, and fast moisture content determination gained from over 40 years of experience in Karl Fischer titration.

Aquastar®
Reagents

Applications
& Support

Volumetry

Coulometry

Water
Standards

Volumetry

Volumetric Karl Fischer titration is the preferred method for water determination in samples of high water content (0.1% to 100% water), and is one of the most frequently used methods for water determination.

We offer a broad range of Aquastar® reagents:

- One component reagents
- Two component reagents
- Reagents for aldehydes and ketones
- Special reagents for oils and fats



Discover Aquastar® titration

Karl Fischer Titration

X

Accurate, reliable, and fast moisture content determination gained from over 40 years of experience in Karl Fischer titration.

Aquastar®
Reagents

Applications
& Support

Volumetry

Coulometry

Water
Standards

Coulometry

For samples with water content of below 1%, coulometric Karl Fischer titration is the preferred method.

Use our Aquastar® coulometric reagents for accurate and reproducible results with titration cells both with and without diaphragms:

- CombiCoulomat Fritless
- CombiCoulomat Frit uses just one reagent for both the anode and cathode chamber



Discover coulometry

Karl Fischer Titration

X

Accurate, reliable, and fast moisture content determination gained from over 40 years of experience in Karl Fischer titration.

**Aquastar®
Reagents**

**Applications
& Support**

Volumetry

Coulometry

**Water
Standards**

Water Standards

For precise water determination every time; our Aquastar® water standards can be used for titer determination, instrument check and verification of results.

Qualified in our DIN EN ISO/IEC 17025 accredited laboratory, you can rely on our Aquastar® standard reference materials.

- Water standards in ampoules, including oil standard (15 to 30 ppm)
- Water standard – oven 1%
- Lactose standard 5%
- Di-Sodium tartrate dihydrate 15.55%
- According to ISO Guide 34



[Discover water standards](#)

[Discover Aquastar® titration](#)

**Accuracy.
precision.
consistency.**

**Physical
Properties**

X

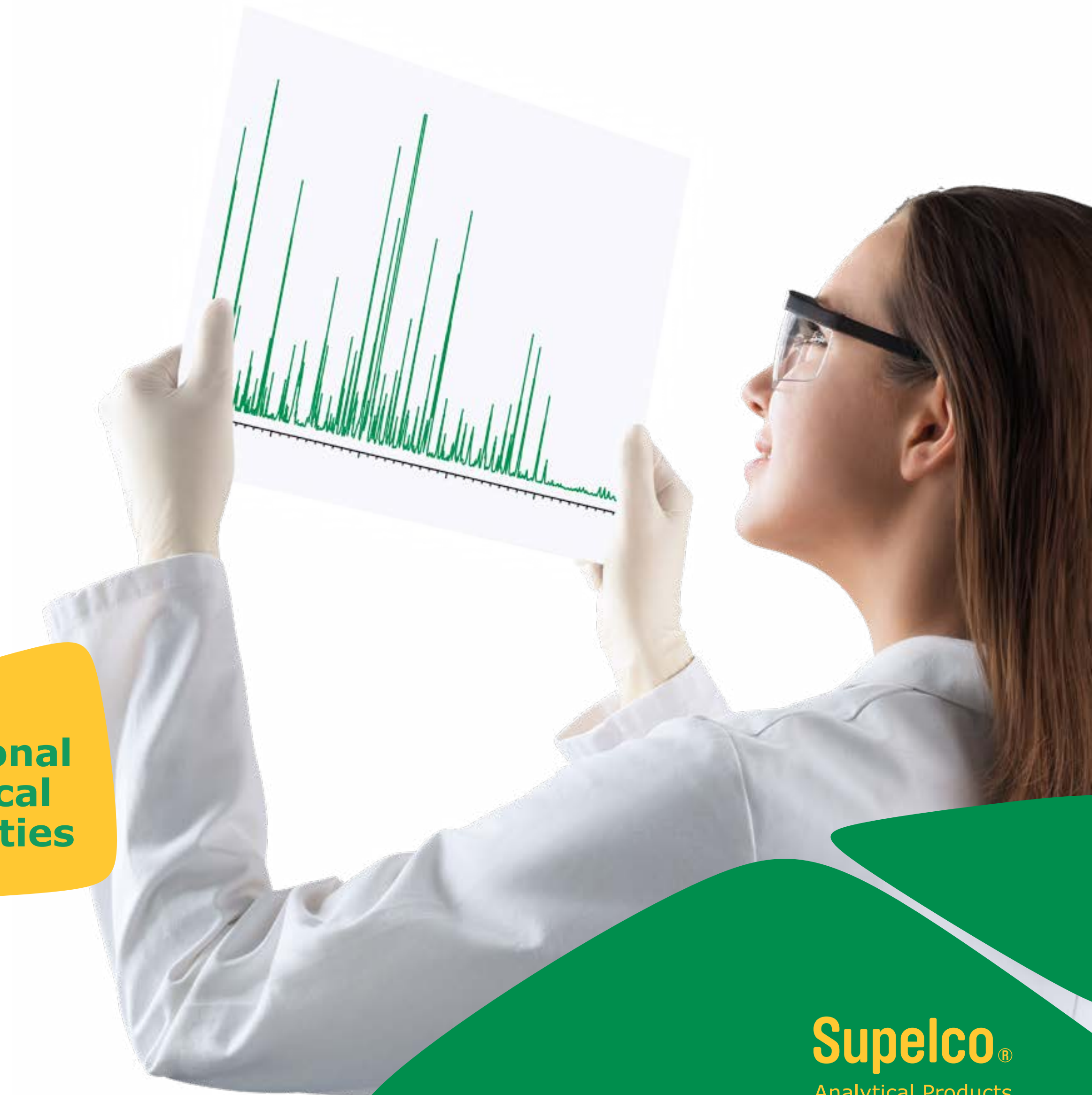
**pH Buffer
Solutions**

Conductivity

Color

**UV/VIS
Standards**

**Additional
Physical
Properties**



Physical Properties



Rely on our trusted portfolio for physical properties including buffers for pH calibration, certified reference materials for conductivity and standards for UV/Vis, viscosity, refractometry and more...

pH Buffer Solutions

Conductivity

Color

UV/VIS Standards

Additional Physical Properties

pH Buffer Solutions

Ready-to-use ISO Guide 34 pH buffer solutions make calibration fast, safe and simple. With convenient packaging formats including single-use sachets and the Titripac® system, calibration has never been easier.



Discover pH Calibration

Physical Properties



Rely on our trusted portfolio for physical properties including buffers for pH calibration, certified reference materials for conductivity and standards for UV/Vis, viscosity, refractometry and more...

pH Buffer Solutions

Conductivity

Color

UV/VIS Standards

Additional Physical Properties

Conductivity

Take the uncertainty out of conductivity measurement with high-quality ISO Guide 34 conductivity certified reference materials. Ready-to-use and available in both PE bottles and convenient single-use sachets, your conductivity calibration will be easy, reliable, and accurate.



Discover Conductivity CRMs

Physical Properties



Rely on our trusted portfolio for physical properties including buffers for pH calibration, certified reference materials for conductivity and standards for UV/Vis, viscosity, refractometry and more...

pH Buffer Solutions

Conductivity

Color

UV/VIS Standards

Additional Physical Properties

Color

Accurate preparation of color reference standards is both complex and time consuming. Improve your lab’s throughput with our ready-to-use color reference solutions.



Discover color solutions

Physical Properties



Rely on our trusted portfolio for physical properties including buffers for pH calibration, certified reference materials for conductivity and standards for UV/Vis, viscosity, refractometry and more...

pH Buffer Solutions

Conductivity

Color

UV/VIS Standards

Additional Physical Properties

UV/VIS Standards

Make your QC a breeze with our ready-to-use reference materials for UV/Vis. With standards covering absorbance, stray light, spectral resolution power and wavelength accuracy, you'll save time and be assured of the highest quality results.



Discover UV/Vis Standards

Physical Properties



Rely on our trusted portfolio for physical properties including buffers for pH calibration, certified reference materials for conductivity and standards for UV/Vis, viscosity, refractometry and more...

pH Buffer
Solutions

Conductivity

Color

UV/VIS Standards

Additional Physical
Properties

Additional Physical Properties

No matter your application, we are able to help with high quality physical property standards from the most trusted brands in the industry:

- Acidity/TAN
- Alkalinity/TBN
- Aniline Point
- Cetane Number
- Cloud Point
- Color
- Conductivity
- Density
- Distillation
- Flash Point
- Freezing Point
- Hardness
- Mass Spec (MS)
- Melting Point
- Particle Size
- pH Valuey
- Plugging Point
- Pour Point
- Redox
- Thermal Analysis
- Total Suspended Solids
- Viscosity
- View All



Discover physical property standards

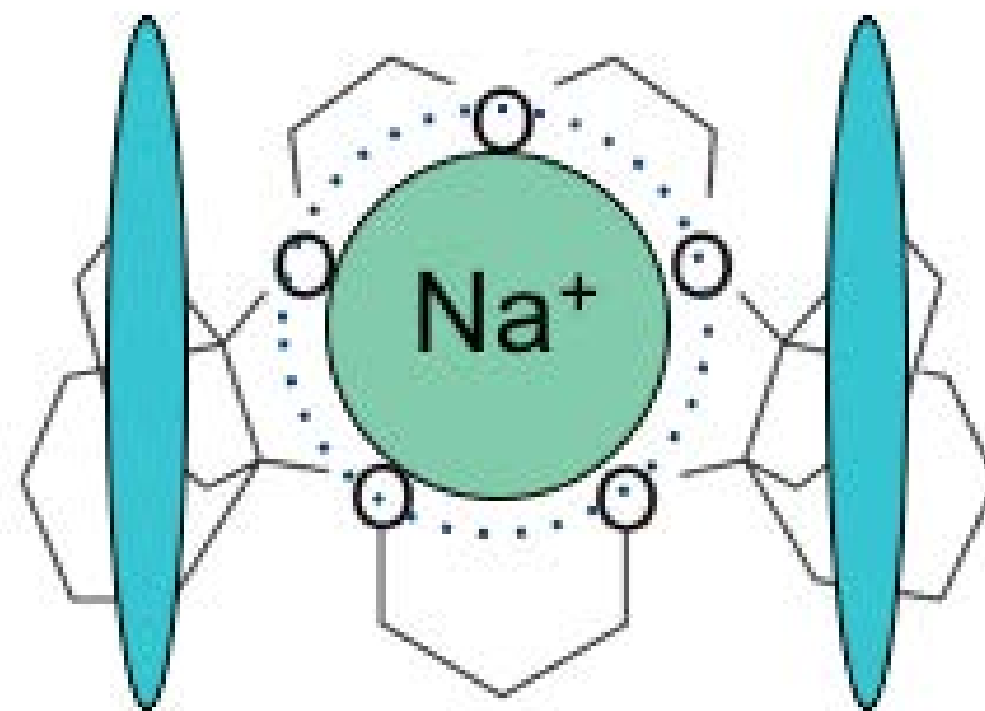
The Selectophore® product line is the most comprehensive portfolio of materials for ion selective electrode measurements.

Selectophore® Ion Sensor Materials

Selectophore® Ion Sensor Materials

With the introduction of the Selectophore® product line, a milestone was set when a series of unique materials for solvent polymeric sensor membranes was commercialized. We offer:

- Ionophores and chromoionophores
- Ready-made membranes and ionophore cocktails
- Polymers and plasticizers
- Calibration and ion strength adjustment solutions
- Additives and solvents
- Accessories and electrode electrolytes
- All Selectophore® products are function tested to fulfill the requirements for optimum performance in ion selective electrode measurements.



[Discover Selectophore® ionophores](#)

**Accuracy.
precision.
consistency.**

**Classical
Analysis**

X

Inorganics

Solvents

**Safe
Packaging**

**Quality
Grades**

**Regulated
Analysis**

**Visual
Analysis**



Inorganics

X

From acids to salts: enjoy the convenience of internationally accepted basic reagents from one trusted source.

Salts

Acids

Caustic Alkalies
& Bases

Metals &
Metal Oxides

Inorganics
learning center

Safety for
Inorganics

Salts

Salts for analytical use are manufactured under strictly controlled conditions almost exclusively at our facilities in Darmstadt, Germany.

- Outstanding analytical purity
- Wide range of salts for analytical purposes



Discover salts

Inorganics

X

From acids to salts: enjoy the convenience of internationally accepted basic reagents from one trusted source.

Salts

Acids

Caustic Alkalies
& Bases

Metals &
Metal Oxides

Inorganics
learning center

Safety for
Inorganics



Acids

Our acids for analysis offer the highest possible quality. Safety is essential when dealing with hazardous acids, so this is why we extended our offering of acids in Safebreak bottles and introduced new withdrawal systems. Our products undergo strict quality checks using the most sensitive analytical instruments and methods.

[Discover our NEW Safebreak bottle sizes](#)

[Select the right withdrawal system for your acid](#)

Inorganics

X

From acids to salts: enjoy the convenience of internationally accepted basic reagents from one trusted source.

Salts

Acids

Caustic Alkalies
& Bases

Metals &
Metal Oxides

Inorganics
learning center

Safety for
Inorganics

Caustic Alkalies & Bases

Our premium quality caustic alkalies and bases are produced using specially selected raw materials. So you can benefit from high purity and batch-to-batch consistency enabling reliable, reproducible analytical results.

- Outstanding, defined quality
- Pellets of defined, uniform size
- Extremely low values of impurities

Select the right withdrawal system for bases

Discover our complete portfolio of caustic alkalies and bases



Inorganics

X

From acids to salts: enjoy the convenience of internationally accepted basic reagents from one trusted source.

Salts

Acids

Caustic Alkalies
& Bases

Metals &
Metal Oxides

Inorganics
learning center

Safety for
Inorganics

Metals & Metal Oxides

Metals and metal oxides are suitable for a multitude of applications in R&D, production and quality control. Selected raw materials, state-of-the-art production technology, and stringent quality management ensure that we deliver you only premium products with consistently high purity and quality.

- Top-level quality
- Excellent batch-to-batch consistency
- Application-led purity and specs

Select the right withdrawal system for your acid



Inorganics

X

From acids to salts: enjoy the convenience of internationally accepted basic reagents from one trusted source.

Salts

Acids

Caustic Alkalies
& Bases

Metals &
Metal Oxides

Inorganics
learning center

Safety for
Inorganics

Inorganics learning center

In our video about classical inorganics, you will learn more about our facilities, packaging development, quality control, and how analytical reagents are produced in our **Empower your Lab** catalogue.



Get your “Empower your Lab” catalogue

Inorganics

From acids to salts: enjoy the convenience of internationally accepted basic reagents from one trusted source.

X

Salts

Acids

Caustic Alkalies
& Bases

Metals &
Metal Oxides

Inorganics
learning center

Safety for
Inorganics

Safety for inorganics

Most acids and bases are highly corrosive and pose severe health hazards, such as skin burns or eye injuries. Prevent hazards with safety accessories from Merck.

Benefit from our **NEW** withdrawal systems for inorganics:

- Increase your personal safety
- Optimize working processes
- Enjoy total flexibility
- Ensure reliability of analytical results
- Save resources



Explore our new withdrawal system for acids and bases

Solvents

X

Your one-stop supplier for solvents – including documentation, secure packaging and withdrawal systems.

Classical
Solvents

Preparative
Chromatography

Returnable
Packaging

Greener Solvent
Alternatives

Solvents for DNA and
peptide synthesis

Safety for
Solvents

Classical Solvents

Distinguished by exceptional quality and reliability, our classical solvents undergo strict controls and continuous development to meet growing regulations and customer requirements. Available in EMSURE[®], EMPARTA[®] and EMPLURA[®] quality grades.

- Outstanding quality for reliable analytical results
- Wide range of pack sizes and packaging materials
- Withdrawal systems available

Get your **UPDATED** “Empower your lab” catalog

Discover safe solvent handling



Solvents

X

Your one-stop supplier for solvents – including documentation, secure packaging and withdrawal systems.

Classical
Solvents

Preparative
Chromatography

Returnable
Packaging

Greener Solvent
Alternatives

Solvents for DNA and
peptide synthesis

Safety for
Solvents

Solvents for Preparative Chromatography

Prepsolv™ solvents are tailored to the requirements of preparative HPLC to facilitate scale-up from analytical to preparative separations.

- Low evaporation residue
- Low water content
- Optimal protection of columns
- High flexibility in pack size and supply concepts

Select your Prepsolv™ solvents

Solvents

X

Your one-stop supplier for solvents – including documentation, secure packaging and withdrawal systems.

Classical
Solvents

Preparative
Chromatography

Returnable
Packaging

Greener Solvent
Alternatives

Solvents for DNA and
peptide synthesis

Safety for
Solvents

Returnable Packaging (Europe only)

Our stainless steel barrels and drums are returnable, meaning that the user no longer has to handle complete emptying, rinsing, and disposal of the rinsing liquid and packaging in the proper manner.

- Environmentally friendly
- Time saving and cost effective
- Withdrawal systems available for safe handling



[Discover our returnable stainless steel barrels \(Europe only\)](#)

[Select your Prepsolv™ solvents](#)

Solvents

X

Your one-stop supplier for solvents – including documentation, secure packaging and withdrawal systems.

Classical
Solvents

Preparative
Chromatography

Returnable
Packaging

Greener Solvent
Alternatives

Solvents for DNA and
peptide synthesis

Safety for
Solvents

Greener Solvent Alternatives

We are committed to continually improving the sustainability performance of our products and adopting a greener chemical process. Our latest advances in green chemistry include:

- Bioethanol
- 2-Methyl tetrahydrofuran
- Cyclopentyl methyl ether
- Ethyl lactate



[Discover benefits of greener solvents](#)

Solvents

X

Your one-stop supplier for solvents – including documentation, secure packaging and withdrawal systems.

Classical
Solvents

Preparative
Chromatography

Returnable
Packaging

Greener Solvent
Alternatives

Solvents for DNA and
peptide synthesis

Safety for
Solvents

Solvents for DNA and peptide synthesis

Water-sensitive DNA and peptide synthesis demand high-purity solvents with the lowest possible water. Our solvents for DNA and peptide synthesis are specifically processed and purified to maximize synthesis efficiency and yields for these critical applications.

- Highest synthesis efficiency and yield
- Fully-sealed returnable stainless steel barrels (Europe only)
- IBC container available on request (Europe only)



Discover solvents for DNA and peptide synthesis

Solvents

X

Your one-stop supplier for solvents – including documentation, secure packaging and withdrawal systems.

Classical
Solvents

Preparative
Chromatography

Returnable
Packaging

Greener Solvent
Alternatives

Solvents for DNA and
peptide synthesis

Safety for
Solvents

Safety for Solvents

Besides offering premium chemicals, we have invested decades into developing the most advanced safety concepts. Our innovative withdrawal systems and safety accessories are precisely tailored to the packaging and its content to protect your personnel and products, but also the environment.

- Solvents safety for bottles
- Solvents safety for drums & barrels
- Customized solvents safety products for individual demands



Get your "Safety connects" brochure

Safe Packaging

X

Besides offering premium chemicals and reagents, we have invested decades into developing the most advanced packaging concepts in the field of chemistry.

**Packaging
Know-How**

**Glass
& HDPE**

**Safe bottles
for acids**

**Canisters & Drums
(PE and steel)**

**Safety
Accessories**

**Stainless Steel
Drums & Barrels**

Packaging Know-How

Our internal packaging department is exclusively responsible for testing, developing and approving packaging materials. Our package testing facility is accredited by the German Federal Institute for Materials Research and Testing.

- Application-oriented packaging materials and volumes
- Safe and convenient handling, storage and transportation
- Optimal protection of chemicals and reagents from contamination



Get your “Safety connects” brochure

Safe Packaging

X

Besides offering premium chemicals and reagents, we have invested decades into developing the most advanced packaging concepts in the field of chemistry.

Packaging
Know-How

Glass
& HDPE

Safe bottles
for acids

Canisters & Drums
(PE and steel)

Safety
Accessories

Stainless Steel
Drums & Barrels

Glass & HDPE

As a valuable inert material, glass bottles are still the most preferred packaging for reagents, but there is always the risk of glass breakage. Our innovative HDPE bottle links safety, environmental protection, and cost savings along the entire process chain.

- No risk of breakage
- Integrated carrier handle for optimal handling
- Optimal center of gravity shift for convenient pouring
- Easy and environmentally-friendly disposal (no polystyrene outer packaging)



Discover acids, bases and solvents in HDPE bottles

Safe Packaging

X

Besides offering premium chemicals and reagents, we have invested decades into developing the most advanced packaging concepts in the field of chemistry.

Packaging
Know-How

Glass
& HDPE

Safe bottles
for acids

Canisters & Drums
(PE and steel)

Safety
Accessories

Stainless Steel
Drums & Barrels

Safebreak bottles & HF bottle

Our Safebreak bottle is coated with polyethylene and can withstand considerable impact force.

- Should breakage occur, liquid acid and glass splinters are reliably contained
- Can be reused and ecologically disposed
- Now also available as 0.5 L and 1 L bottle



[Learn more about acids in Safebreak bottles](#)

[Discover our complete range of acids](#)

Safe Packaging

X

Besides offering premium chemicals and reagents, we have invested decades into developing the most advanced packaging concepts in the field of chemistry.

Packaging
Know-How

Glass
& HDPE

Safe bottles
for acids

Canisters & Drums
(PE and steel)

Safety
Accessories

Stainless Steel
Drums & Barrels

PE and Steel Canisters and Drums for Acids, Bases and Solvents

For your higher demands of acids, bases and solvents, we offer convenient one-way solutions that are tailored to the properties of our chemical substances.

- Safe and easy usage
- Standard openings
- No contamination due to high quality packaging material

NOW available - Withdrawal systems for acids and bases.

Get your “Safety connects” brochure



Safe Packaging

X

Besides offering premium chemicals and reagents, we have invested decades into developing the most advanced packaging concepts in the field of chemistry.

Packaging
Know-How

Glass
& HDPE

Safe bottles
for acids

Canisters & Drums
(PE and steel)

Safety
Accessories

Stainless Steel
Drums & Barrels



Safety Accessories

To further protect you throughout your daily work, we offer several safety accessories specially designed for our S40 bottles.

- Withdrawal systems
- Level sensors for solvents
- Safety carriers for glass bottles
- Pouring and opening aids
- Label sets acc. to GHS, DIN EN ISO and GLP

Get your “Safety connects” brochure

Safe Packaging

X

Besides offering premium chemicals and reagents, we have invested decades into developing the most advanced packaging concepts in the field of chemistry.

Packaging
Know-How

Glass
& HDPE

Safe bottles
for acids

Canisters & Drums
(PE and steel)

Safety
Accessories

Stainless Steel
Drums & Barrels

Stainless Steel Drums & Barrels

Our stainless steel barrels and drums are returnable, meaning that the user no longer has to handle complete emptying, rinsing, and disposal of the rinsing liquid and packaging in the proper manner.

- Environmentally friendly
- Time saving and cost effective
- Withdrawal systems available for safe handling



Discover our returnable stainless steel barrels (Europe only)

Select your Prepsolv® solvents

Quality Grades



Each application poses unique demands – That's why we offer inorganics and solvents clearly structured in different quality grades.

Grade
overview

EMSURE®
for analysis

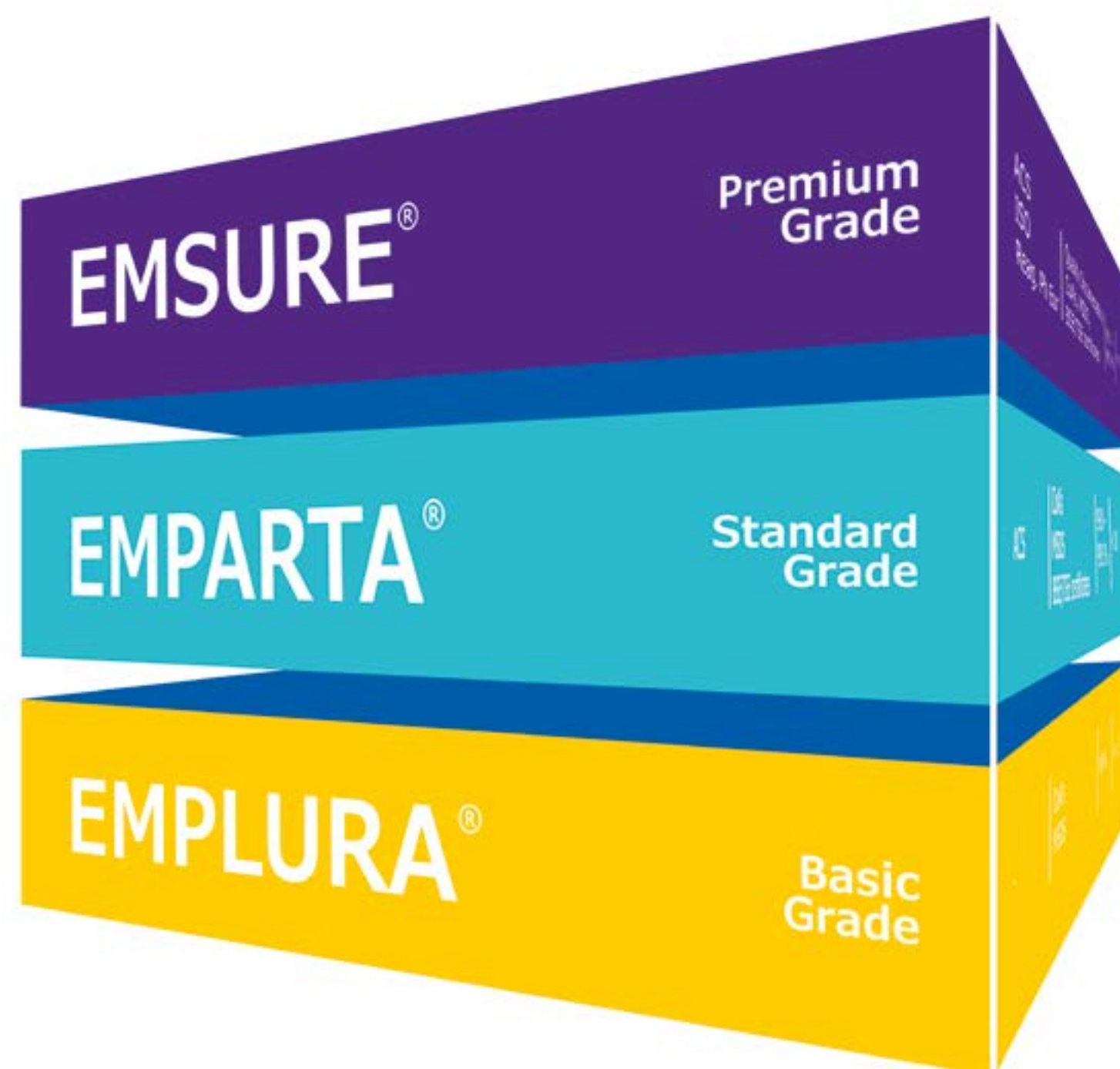
EMPARTA®
for analysis

EMPLURA®

Grade overview

Quality grades for classical inorganics and solvents:

- EMSURE® Premium Grade: For regulated and demanding analytical applications
- EMPARTA® Standard Grade: For routine lab applications
- EEMPLURA® Basic Grade: For preparative lab work, cleaning and production



[Learn more about our quality grades](#)

Quality Grades

Each application poses unique demands – That's why we offer inorganics and solvents clearly structured in different quality grades.

Grade
overview

EMSURE®
for analysis

EMPARTA®
for analysis

EMPLURA®

EMSURE® for analysis

EMSURE® inorganics and solvents are our premium-grade products—optimized for critical and regulated analyses and highly demanding lab applications.

- Highest quality
- Widest scope of specifications
- Full compliance with international regulations

Discover EMSURE® – our premium-grade

Learn more about the EMSURE® Quality Documentation



X

Quality Grades



Each application poses unique demands – That's why we offer inorganics and solvents clearly structured in different quality grades.

**Grade
overview**

**EMSURE®
for analysis**

**EMPARTA®
for analysis**

EMPLURA®



EMPARTA® for analysis

EMPARTA® products are designed for routine tasks in the analytical laboratory. These standard-grade products cover all important parameters and offer full ACS compliance.

- Standard quality for routine lab applications
- Efficient and cost-effective solution

Get your “Empower your Lab” catalogue

Discover EMPARTA® – our standard-grade

Quality Grades

X

Each application poses unique demands – That's why we offer inorganics and solvents clearly structured in different quality grades.

Grade
overview

EMSURE®
for analysis

EMPARTA®
for analysis

EMPLURA®



EMPLURA®

EMPLURA® products are your cost-efficient choice for preparative lab applications, standard production processes, and cleaning purposes. These basic-grade inorganic reagents and solvents:

- Offer adequate specifications with most common parameters
- Are available in small pack sizes as well as in bulk quantities

Get your “Empower your Lab” catalogue

Discover EMPLURA® reagents – our basic-grade

Regulated Analysis

Analytical reagents are specified in accordance with various international regulations.

X

Analytical
Competence

Compliance

Documentation

Pharmaceutical
Analysis

Purity

Analytical Competence

We don't just promise the highest quality, we prove it!
Through stringent testing at our state-of-the-art labs.

- Our analytical competence
- Your analytical confidence
- Three quality grades to empower all applications



Regulated Analysis

Analytical reagents are specified in accordance with various international regulations.



Analytical
Competence

Compliance

Documentation

Pharmaceutical
Analysis

Purity

Compliance

Our analytical reagents are specified in accordance with various international regulations depending on their quality grade. This way, we make sure their specifications suit the regulatory environment you work in.

- American Chemical Society (ACS)
- Reagents section of the European Pharmacopoeia (Reag. Ph Eur)
- International Organization for Standardization (ISO)

[Learn more about multi-standard compliance](#)



Regulated Analysis

Analytical reagents are specified in accordance with various international regulations.

X

Analytical
Competence

Compliance

Documentation

Pharmaceutical
Analysis

Purity

Documentation

Especially for our EMSURE® grade we offer an unrivalled documentation service in the field of analytical reagents. With EMSURE® Quality Documentation, you'll always be ready for demanding lab applications and audits.

- Less administration work
- Details on test protocols save analytical time
- Faster preparation for audits

[Learn more about EMSURE® Quality Documentation](#)



Regulated Analysis

Analytical reagents are specified in accordance with various international regulations.



Analytical
Competence

Compliance

Documentation

Pharmaceutical
Analysis

Purity

Pharmaceutical Analysis

Our analytical reagents meet the authoritative quality guidelines for pharmacopoeia analysis worldwide. Our analytical reagents are not only specified in accordance with the American ACS standard but also Reag. Ph Eur.

- Audit acceptance
- Lower validation efforts



Discover all reagents for pharmacopoeia analysis

Regulated Analysis

Analytical reagents are specified in accordance with various international regulations.



Analytical
Competence

Compliance

Documentation

Pharmaceutical
Analysis

Purity

Purity

Our solvents and inorganics are renowned for their outstanding quality and purity. Every step in our supply chain is subject to the most stringent controls and fully documented to give you complete confidence in your analysis.

- Outstanding chemical purity
- Extremely low limiting values
- Reliable qualitative and quantitative analyses

Discover highly pure chemicals



Visual Analysis

X

Our MQuant® test strips are pocket-sized laboratories covering over 30 different parameters for your quick and simple analyses.

MQuant® Test Strips

MQuant® Visual tests

MQuant® pH indicator test strips

MQuant® Test Strips

MQuant® test strips are pocket-sized laboratories for quick and simple analyses, offering a fast way to test food, beverage, or environmental samples.

- Analyze your data with your smartphone
- Reliable digital test strip readout, data storage and visualization
- Advanced data analysis with our StripScan web application



It's that simple!

Download the app here!

Visual Analysis

X

Our MQuant® test strips are pocket-sized laboratories covering over 30 different parameters for your quick and simple analyses.

MQuant® Test Strips

MQuant® Visual tests

MQuant® pH indicator test strips

MQuant® Visual tests

MQuant® colorimetric and titrimetric test kits. Achieve easy, fast and direct read-out of color cards, disks or vessels for testing:

- wastewater
- industrial water
- ground water
- drinking or bottled water
- swimming pool water

Be brilliant!



Visual Analysis

X

Our MQuant® test strips are pocket-sized laboratories covering over 30 different parameters for your quick and simple analyses.

MQuant® Test Strips

MQuant® Visual tests

MQuant® pH indicator test strips

MQuant® pH indicator test strips

pH value plays a highly important role in biochemistry, chemistry and technology, and our pH test strips, indicator paper and solutions provide rapid results.

- Security and convenience with safety edge box and roll format
- Special indicator dyes ensuring accuracy
- Transparent pH strips designed to handle cloudy solutions



Fast method pH test strips

Accuracy.
precision.
consistency.

Safety
&
Essentials

X

Safe
Handling

Cleaning

Essentials

Buffers



Supelco®
Analytical Products

Safe Handling

X

For a safe and contamination-free work environment, our sophisticated handling and safety products for solvents and inorganics will give you peace of mind.

**Bottle
Safety**

**Solvent Bottle
Withdrawal**

**Solvent
Container Safety**

**Solvent Container
Withdrawal**

**Solvents Customized
Installations**

**Safety for
Inorganics**

Bottle Safety

Daily handling of hazardous goods demands high health protection. For breakable glass bottles in particular, there are several additional safety products to help you comply with laws and regulations and make daily lab work safer and more convenient.

- Safety carriers
- Opening key, pouring aid and safety stand
- HPLC-bottle adapters
- Labeling according to international regulations

Get your “Safety connects” brochure



Safe Handling

X

For a safe and contamination-free work environment, our sophisticated handling and safety products for solvents and inorganics will give you peace of mind.

Bottle
Safety

Solvent Bottle
Withdrawal

Solvent
Container Safety

Solvent Container
Withdrawal

Solvents Customized
Installations

Safety for
Inorganics

Solvent Bottle Withdrawal

Ensure safe and easy handling and contamination-free withdrawal of organic solvents with our broad range of withdrawal systems and accessories.

- Withdrawal systems
- Level sensors



Select your withdrawal system

Safe Handling

X

For a safe and contamination-free work environment, our sophisticated handling and safety products for solvents and inorganics will give you peace of mind.

**Bottle
Safety**

**Solvent Bottle
Withdrawal**

**Solvent
Container Safety**

**Solvent Container
Withdrawal**

**Solvents Customized
Installations**

**Safety for
Inorganics**

Solvent Container Safety

The majority of very critical solvent accidents are caused by static electricity. Solvents in containers from 10 L (drums/barrels) need to be treated with the highest safety considerations e.g. discharge static electricity properly.

- Antistatic device
- Opening key
- Gas-reducing valves
- Wall ducts and nozzle clamps

Get your “Safety connects” brochure



Safe Handling

X

For a safe and contamination-free work environment, our sophisticated handling and safety products for solvents and inorganics will give you peace of mind.

Bottle
Safety

Solvent Bottle
Withdrawal

Solvent
Container Safety

Solvent Container
Withdrawal

Solvents Customized
Installations

Safety for
Inorganics

Solvent Container Withdrawal

Designed to meet all relevant safety regulations, our tailor-made withdrawal systems ensure safe, easy and efficient withdrawal for every application.

- Maximum user safety
- Easy and contamination-free handling of solvents and inorganics
- Application orientated solutions and individual installations
- Ecological and economic benefits



Select your withdrawal system

Safe Handling

X

For a safe and contamination-free work environment, our sophisticated handling and safety products for solvents and inorganics will give you peace of mind.

**Bottle
Safety**

**Solvent Bottle
Withdrawal**

**Solvent
Container Safety**

**Solvent Container
Withdrawal**

**Solvents Customized
Installations**

**Safety for
Inorganics**

Customized Installations for Solvents

Optimize your work processes with regard to safety and efficiency. Where large volumes of solvents are turned around, delivery from a central safety cabinet to the point of use (e.g. lab fume hood) through a permanent supply circuit is one of the most rational ways of working.

- Standardized and customized installations available
- Installation support
- Automated processes with level sensors

Discover safe handling



Safe Handling

X

For a safe and contamination-free work environment, our sophisticated handling and safety products for solvents and inorganics will give you peace of mind.

Bottle
Safety

Solvent Bottle
Withdrawal

Solvent
Container Safety

Solvent Container
Withdrawal

Solvents Customized
Installations

Safety for
Inorganics

Safety for inorganics

Most acids and bases are highly corrosive and pose severe health hazards, such as skin burns or eye injuries. Prevent hazards with safety accessories from Merck.

Benefit from our **NEW** withdrawal systems for inorganics:

- Increase your personal safety
- Optimize working processes
- Enjoy total flexibility
- Ensure reliability of analytical results
- Save resources



Explore our new withdrawal system for acids and bases

Cleaning

X

Protect your work, your personnel and the environment with our reliable, residue-free and biodegradable cleaning solutions.

Extran® Detergents

**Extran® MA
Cleaning Agents**

**Extran® AP
Cleaning Agents**

Specialties

**Extran®
Accessories**



Extran® Detergents

With thorough, residue-free cleaning, Extran® products ensure that equipment that comes into contact with chemicals or biological substances must be free of impurities, both before and after use. Trust our range of all-purpose detergents for manual cleaning or automated cleaning.

- Constant product quality and composition
- Free of scent, dyestuff, oxidants, chlorine, enzymes and NTA
- Technical application and validation support
- Biodegradable and toxin-free

Select your Extran® products

Cleaning

X

Protect your work, your personnel and the environment with our reliable, residue-free and biodegradable cleaning solutions.

Extran® Detergents

Extran® MA
Cleaning Agents

Extran® AP
Cleaning Agents

Specialties

Extran®
Accessories

Extran® MA Cleaning Agents

The Extran® MA range for manual washing are universally applicable concentrates for the production of water baths which work reliably and without residue in lab cleaning processes

- Concentrated liquids
- Alkaline (MA01), neutral (MA02) and alkaline phosphate free (MA05)
- Recommended application concentrations: 2 - 20%
- Application length less than 2 hours
- Ideally suited to ultrasound cleaning
- Application and validation support

Select your Extran® products



Cleaning

X

Protect your work, your personnel and the environment with our reliable, residue-free and biodegradable cleaning solutions.

Extran® Detergents

Extran® MA
Cleaning Agents

Extran® AP
Cleaning Agents

Specialties

Extran®
Accessories

Extran® AP Cleaning Agents

The Extran® AP range was created in cooperation with leading appliance manufacturers especially for the use in laboratory washing machines. Benefit from:

- Broad range of application / contamination oriented cleaner types and neutralization agents (alkaline, mildly alkaline, acidic)
- Powders and liquids, concentrated
- Distinctive cleaning power with extensive universal effects
- Very low foam formation
- High solubility in water of all components that minimises residues
- High flexibility and safety by a broad range of different pack sizes
- Application and validation support



Select your Extran® products

Cleaning



Protect your work, your personnel and the environment with our reliable, residue-free and biodegradable cleaning solutions.

Extran® Detergents

Extran® MA
Cleaning Agents

Extran® AP
Cleaning Agents

Specialties

Extran®
Accessories

Specialties

Effective solutions for tough jobs: whether you require a mild or strong cleaning agent, our high-quality products help you achieve reliable results. Save valuable time and effort in your daily lab work, e.g. with sodium hydroxide solution.



Select your specialties

Cleaning



Protect your work, your personnel and the environment with our reliable, residue-free and biodegradable cleaning solutions.

Extran® Detergents

**Extran® MA
Cleaning Agents**

**Extran® AP
Cleaning Agents**

Specialties

**Extran®
Accessories**

Extran® Accessories

Enjoy our specially developed tools for your safety and convenience in daily cleaning processes with Extran® accessories:

- Dosing aid for Extran® MA agents in 1 liter bottles
- Universal adapter for machine connection to our 10l and 25l Extran® AP canisters
- Taps and adapters for direct withdrawal and increased connectivity of our Extran® pack-sizes



Select your Extran® products

Essentials

X

Safety, simplicity and sustainability – our extensive portfolio for essential applications, e.g. drying, purification, absorption and indication of reactions.

**Chemizorb®
Absorbents**

**Absorption
& Filtration**

Drying Agents

**Preparation materials
& Auxiliaries**

Indicators

Chemizorb® Absorbents

Accidental spills of hazardous liquids can happen in any lab. With Chemizorb® absorbents, you can absorb and neutralize harmful, aggressive or other unpleasant liquids quickly, safely and without harming the environment.

We offer a choice of absorbents for a variety of chemical spills:

- “All-round” Chemizorb® powder or granules
- “Specialist” Chemizorb® absorbents for alkalis, acids and hydrofluoric acid
- “All-in-one” Chemizorb® Hg set for mercury



Select your Chemizorb® products

Essentials

X

Safety, simplicity and sustainability – our extensive portfolio for essential applications, e.g. drying, purification, absorption and indication of reactions.

**Chemizorb®
Absorbents**

**Absorption
& Filtration**

Drying Agents

**Preparation materials
& Auxiliaries**

Indicators

Absorption & Filtration

Absorption, adsorption and filtration are among the most important applications in laboratory practice. We offer a wide variety of premium absorption and adsorption reagents, as well as filtration and clarification materials.



Select your absorption & filtration products

Essentials

X

Safety, simplicity and sustainability – our extensive portfolio for essential applications, e.g. drying, purification, absorption and indication of reactions.

**Chemizorb®
Absorbents**

**Absorption
& Filtration**

Drying Agents

**Preparation materials
& Auxiliaries**

Indicators

Drying Agents

Drying agents (desiccants) from us are the ideal choice for your drying applications in the lab, in production, as well as for storage and transport. Our user-friendly products are suitable for a wide range of applications, from the drying of gases, liquids or solids using static or dynamic drying processes, to the protection of goods and materials from moisture, mold or corrosion. We offer convenient and safe options, e.g. desiccant sachets, silica gel or molecular sieves without carcinogenic blue gel indicators.

Select your drying agents



Essentials

X

Safety, simplicity and sustainability – our extensive portfolio for essential applications, e.g. drying, purification, absorption and indication of reactions.

**Chemizorb®
Absorbents**

**Absorption
& Filtration**

Drying Agents

**Preparation materials
& Auxiliaries**

Indicators

Preparation Materials & Auxiliaries

Whether you need to purify, enrich or separate samples of solids, liquids or gases, simplify your work with our preparation materials and auxiliaries. They offer excellent batch consistency to ensure reliable, reproducible results, and are supplied in a variety of pack sizes to meet all your needs. This product group contains glass beads, paraffin, heating bath fluid, silicic acid, water detection paste and many more.



Select your preparation materials & auxiliaries

Essentials

X

Safety, simplicity and sustainability – our extensive portfolio for essential applications, e.g. drying, purification, absorption and indication of reactions.

**Chemizorb®
Absorbents**

**Absorption
& Filtration**

Drying Agents

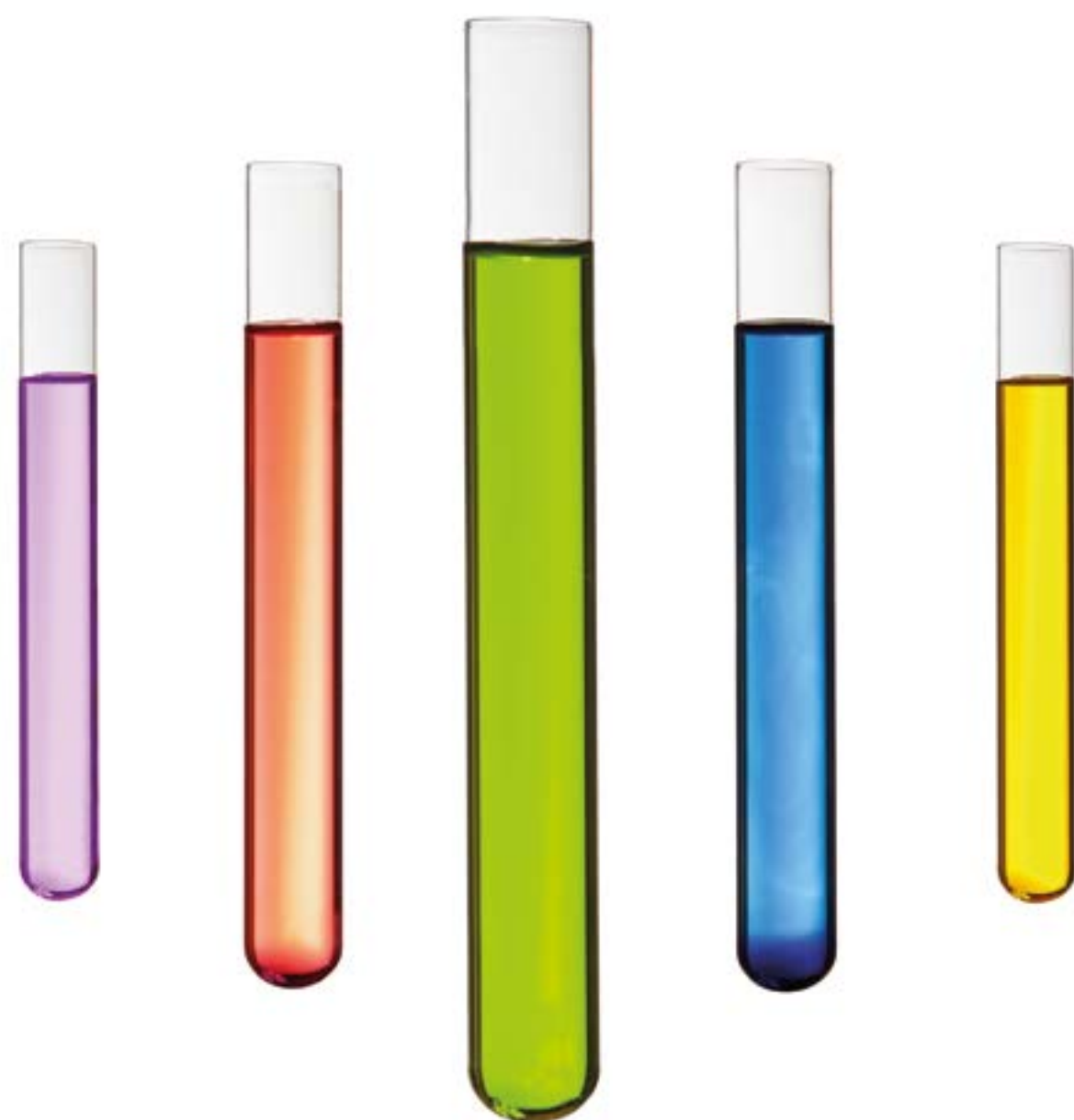
**Preparation materials
& Auxiliaries**

Indicators

Indicators

Indicators are used in laboratories to observe chemical reactions. Whether for monitoring a chemical status, change of reaction or the end-point of a titration, you can rely on our large portfolio of indicators for highly accurate results.

- Acid-alkali indicators / pH indicators
- Redox indicators
- Complex / metal indicators
- Fluorescence indicators and special applications



Select your pH indicators

Buffers

X

Certipur® buffer solutions & substances - certified reference materials according to ISO/IEC 17034, the gold standard for a reliable pH calibration.

Accreditation

Secondary
Buffers

Ready-to-use
Buffers

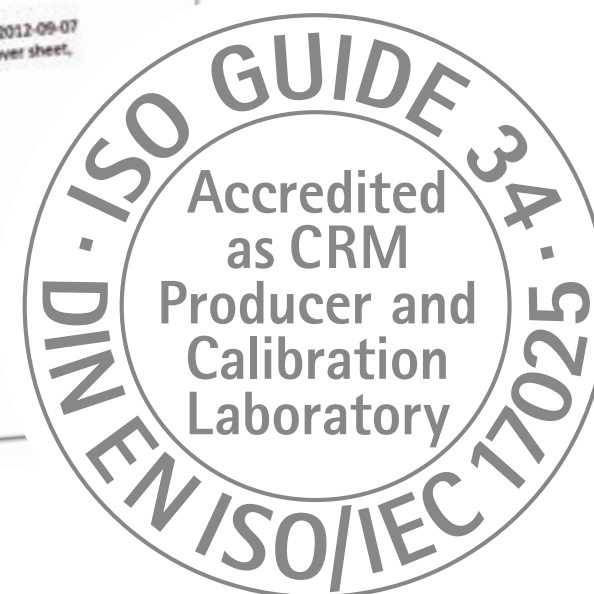
Buffers
in Sachets

Buffers in Titripac®
Packaging

Buffers according
to USP & Ph. Eur.

Accreditation

Certipur® buffer solutions and substances are now accredited as certified reference materials according to ISO Guide 34. Along with our existing ISO/IEC 17025 accreditation as a testing and calibration laboratory, we now have the highest possible quality standard for certified reference materials.



Discover more

Buffers



Certipur® buffer solutions & substances - certified reference materials according to ISO/IEC 17034, the gold standard for a reliable pH calibration.

- Accreditation
- Secondary Buffers
- Ready-to-use Buffers
- Buffers in Sachets
- Buffers in Titripac® Packaging
- Buffers according to USP & Ph. Eur.

Secondary Buffers

Certified secondary buffers solutions & substances are employed for accurate calibration and monitoring of pH instruments and for control of other buffer solutions. Measured according to NIST, IUPAC, DIN, USP & Ph. Eur. very precisely with uncertainty of only ± 0.003 pH units and supplied with full traceability and uncertainty documentation.



Discover more

Buffers

X

Certipur® buffer solutions & substances - certified reference materials according to ISO/IEC 17034, the gold standard for a reliable pH calibration.

Accreditation

Secondary
Buffers

Ready-to-use
Buffers

Buffers
in Sachets

Buffers in Titripac®
Packaging

Buffers according
to USP & Ph. Eur.

Ready-to-use Buffers

Precise and convenient ready-to-use buffer solutions for the daily routine calibration of pH instruments.

- Excellent quality—ISO/IEC 17034 accreditation
- Safe and convenient packaging concepts—Titripac® packaging, single-use sachets, & bottles
- Five point calibration against both NIST and PTB certified reference materials
- Accompanied by audit conformance certificates



Discover more

Buffers

X

Certipur® buffer solutions & substances - certified reference materials according to ISO/IEC 17034, the gold standard for a reliable pH calibration.

Accreditation

Secondary
Buffers

Ready-to-use
Buffers

Buffers
in Sachets

Buffers in Titripac®
Packaging

Buffers according
to USP & Ph. Eur.

Buffers in Sachets

Ready-to-use Certipur® certified buffer solutions packed in convenient single-use sachets for reliable calibration.

- Individually packed in hermetically sealed sachets
- Always fresh, accurate and ready-to-use
- No risk of contamination
- Broad range of buffers available



Discover more

Buffers

X

Certipur® buffer solutions & substances - certified reference materials according to ISO/IEC 17034, the gold standard for a reliable pH calibration.

Accreditation

Secondary
Buffers

Ready-to-use
Buffers

Buffers
in Sachets

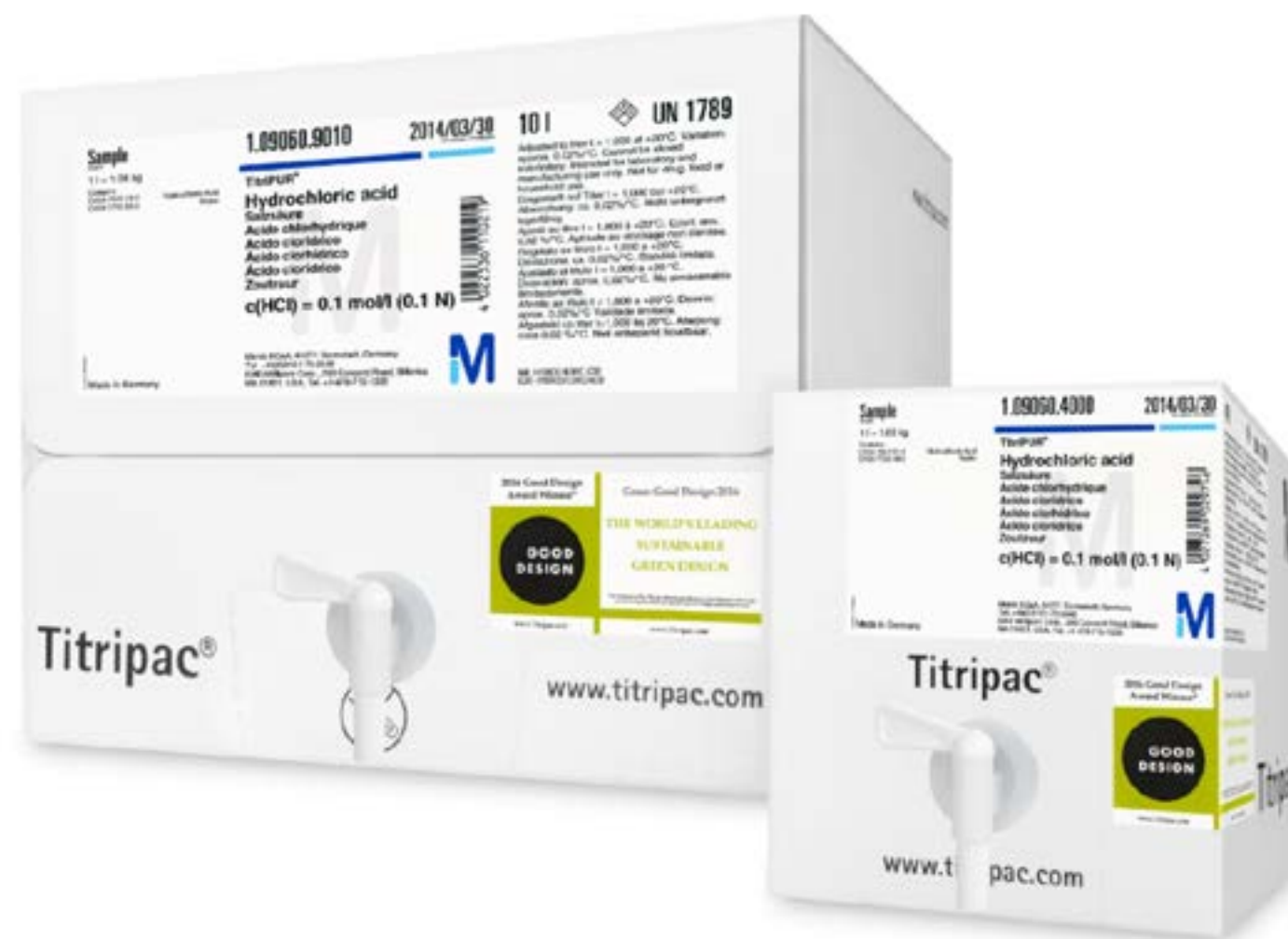
Buffers in Titripac®
Packaging

Buffers according
to USP & Ph. Eur.

Buffers in Titripac® packaging

Certipur® buffer solutions are also offered in our innovative and convenient Titripac® packaging—economic and ecological solutions for easy and accurate pH calibration.

- No contamination of the solutions after opening the Titripac® packaging
- Convenient—just open and close the tap
- Less waste—use only the exact quantity needed
- Broad range of buffers in Titripac® packaging



Discover our Titripac® system

Buffers

X

Certipur® buffer solutions & substances - certified reference materials according to ISO/IEC 17034, the gold standard for a reliable pH calibration.

Accreditation

Secondary
Buffers

Ready-to-use
Buffers

Buffers
in Sachets

Buffers in Titripac®
Packaging

Buffers according
to USP & Ph. Eur.

Buffers according to USP & Ph. Eur.

Certipur® buffer solutions are produced and tested according to EP and USP guidelines for the most precise calibration, qualification and monitoring applications.

- Accompanied by a Certificate of Analysis with all the details needed for internal documentation and audits
- Available in a variety of formats—sachets, bottles and as secondary reference buffer solutions & substances
- Accreditation according to ISO/IEC 17034
- Traceable to NIST reference materials



Discover more

Accuracy.

We know only the most accurate analytical products will do. That's why Merck offers the Supelco® portfolio of analytical products. Whatever your needs are, our portfolio is always fit for purpose, ensuring your results are accurate.

Precision.

Supelco® scientists are dedicated to your analytical applications. The expertise you need is always on hand to support you in achieving the reproducibility you require.

Consistency.

Every product from the Supelco® portfolio is meticulously quality-controlled to maintain the integrity of your testing protocols.





We provide information and advice to our customers on application technologies and regulatory matters to the best of our knowledge and ability, but without obligation or liability. Existing laws and regulations are to be observed in all cases by our customers. This also applies in respect to any rights of third parties. Our information and advice do not relieve our customers of their own responsibility for checking the suitability of our products for the envisaged purpose.

© 2019 Merck KGaA, Darmstadt, Germany and/or its affiliates. All Rights Reserved. Merck, the vibrant M, Aquastar, Titripur, Titripac, Titrisol, Certipur, Suprapur, Spectromelt, Spectroquant, Reflectoquant, MQuant, Selectophore, EMSURE, EMPARTA, EMPLURA, SeccoSolv, SeccoSept, Prepsolv, Extran, Chemizorb, Certipur and LiChropur 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.

Lit. No. MK_BR3393EN Vol.2
2019 - 21594 05/2019



For further information, please contact your local
VWR organization or have a look at the VWR webpages:
[vwr.com/merck](https://www.vwr.com/merck)

