VWR® Chemicals for laboratories scale up & production

01. STABILITY

02. RELIABILITY

03. VALUE & PERFORMANCE

04. INNOVATIONS



Welcome to the VWR Chemicals world for laboratories and production

VWR part of Avantor, from discovery to delivery, our objective is to be the trusted global partner to customers and suppliers in the life sciences and advanced technology industries. By providing superior product and service solutions, we accelerate innovation and empower the success of our customers.

We set science in motion to create a better world

The brands we have in our portfolio have over 100 years of heritage in seeking to make scientists lives as easy and cost effective as possible.

Working with our customers, our goal is clear - to make VWR Chemicals your first choice, whatever your application, for both quality and value. Using customer feedback, we're proud to be able to offer:

Thousands of products for analysis, research and production

- Multiple grades ensuring the right quality for each application
- Laboratory and production pack sizes
- Custom manufacturing services

We never lose sight of the fact that we need to deliver all this in full compliance with the European REACh directive, plus the Global Harmonised system of hazardous chemical labelling and other legislation, as it arises.

VWR has also invested heavily in quality improvement systems and process excellence, and we will continue to demonstrate our commitment to sustainability.

We hope you find in our large chemical range, all the products you need.



Balancing people, planet & performance

Quality, environmental, health, safety, security and sustainability policies for all European operations.

QUALITY AND PROCESS EXCELLENCE

VWR part of Avantor, was the first major European laboratory distribution supplier to achieve triple-certification to the following international standards:

- Quality – ISO 9001:2008
- Environment – ISO 14001:2004
- Health and safety – OHSAS 18001:2007

Our certification gives customers confidence that a third party certification body regularly audits us; checking how we organise our processes and the human/technical factors that could affect quality and the environment. This means our customers can be sure that the service we provide is of the highest quality. VWR works continually on enlarging the scope of our certification and has recently gained:

- ISO 17034:2016 for our laboratories where our certified pH buffers are tested to ensure you can totally rely on the quality of these products


Organisme belge d'Accréditation
Belgische Accreditatieinstelling
Belgische Akkreditierungsstelle
Belgian Accreditation Body

Signatory to EA, ILAC and IAF Multilateral Agreements

Accreditation Certificate No. 542-RM

In compliance with the provisions of the Royal Decree of 31 January 2006 setting up BELAC, the Accreditation Board hereby declares, that the laboratory

VWR INTERNATIONAL BVBA
Researchpark Haasrode 2020 - Geldenaaksebaan, 464
3001 LEUVEN - Belgium

has the competence to produce reference materials as described in the annex which is an integral part of the present certificate, in accordance with the requirements of the standard ISO 17034:2016. The present accreditation is the subject of regular surveillance in order to confirm the compliance with the accreditation conditions.

The Chair of the Accreditation Board BELAC,

Issue date : 2019-10-17
Validity period : 2019-10-17 - 2024-10-16
Original version of this certificate is in Dutch.

Nicole MEURÉE-VANLAETHEM

.be

WHAT DOES THIS ACCREDITATION MEAN FOR YOU?

- Accreditation is based on the presence of a competent testing laboratory, where not only qualified staff have to be employed, but where each and every analysis carried out has to correspond to specified criteria
- All instrumentation used is regularly checked by officially authorised calibration laboratories
- All relevant parameters used in measurement, e.g. weight and temperature, correspond to national and international standards
- General requirements for the competence and consistent operation of reference material production
- All methods that the manufacturer uses to certify their standards must be validated and proven to be accurate

ONGOING INVESTMENT IN PRODUCTION FACILITIES

VWR part of Avantor, production sites in France and Belgium have been recently expanded to include new automated and semi-automated filling lines to enhance our capability, flexibility and improve service levels. Our sites are regularly audited by our customers with very successful results.

We use cleanrooms according to ISO standard 7 for the filling of Pharmacopoeia quality products. Our analytical services are being continually upgraded and are capable of performing all the latest testing techniques.

CELEBRATE SUSTAINABILITY

VWR recognises that building sustainable business practices to enhance the value of the company is in the best interest of our company, associates, suppliers, customers and our community. We also understand that our customers have sustainability initiatives, and VWR is committed to helping them achieve their sustainability goals.

At VWR we are approaching sustainability to meet the three primary goals as defined by the UN World Commission on Environment and Development:

- Social Impact (People)
- Environmental Protection (Planet)
- Economic Growth (Performance)

If you want to learn more about our approach to sustainability, go to vwr.com to find all the information in 'About VWR'.



VWR Chemicals corner

RESEARCH BY BRAND OR RANGES

Brands

- VWR Chemicals
- VWR Custom Manufacturing Services
- Merck
- Honeywell
- JT Baker from Avantor
- Alfa Aesar
- Acros Organics

Ranges (VWR brands only)

- Chemicals and reagents
- Reference materials
- Production and customised products
- Microbiology and hygiene testing
- Chromatography
- Life sciences
- Environmental

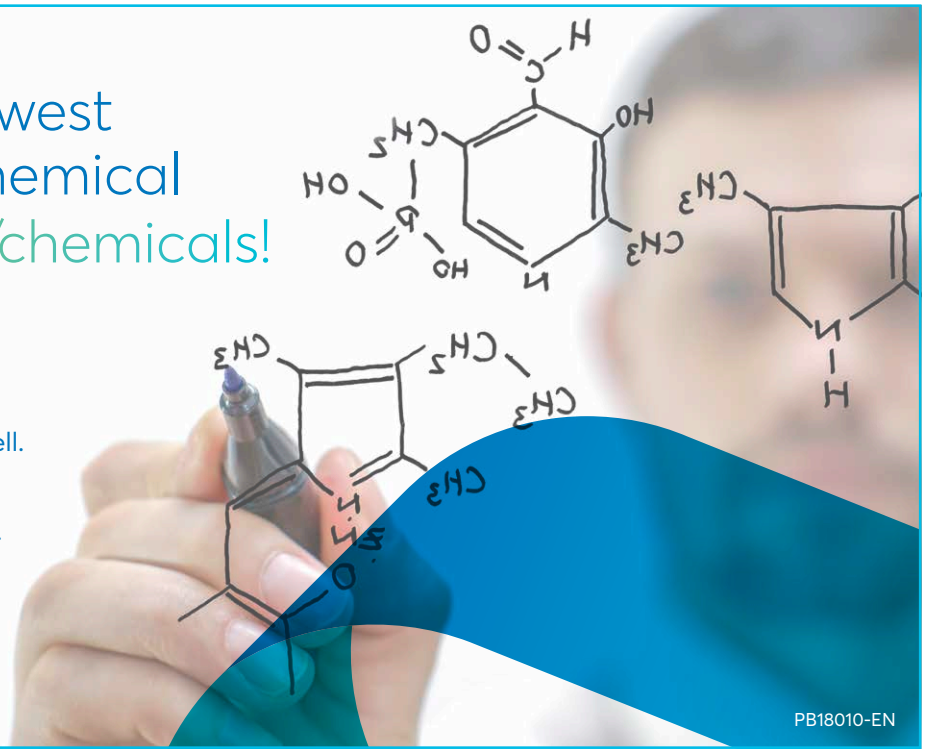
Direct access to news, literature, promotions, contacts, MSDS and other certificates at vwr.com/chemicals

Discover all the newest additions to our chemical range on vwr.com/chemicals!

Discover all our major brands such as VWR Chemicals, Merck, Avantor, Acros Organics, Alfa Aesar and Honeywell.

You will find all the chemical promotion, new products, literature, MSDS, CoA, etc. in one place on vwr.com/chemicals

Go to vwr.com/chemicals



PB18010-EN

VWR laboratory chemicals

SPECIFICATIONS

The specifications quoted are maximum permitted levels of impurities, not typical analyses. Certificates of specification and analysis are readily available on our website.

New labelling conforming to CLP Regulation (EC) No. 1272/2008 includes a QR code.

The new multi-lingual labels are designed to help you find the information you need easily and quickly. They always include an expiry date for unopened and correctly stored products, and usually a space for customers to enter the date of receipt and/or when the bottle was first opened. The new labels also comply with CLP requirements. The guaranteed specification of the product appears on the label if space allows. Otherwise the current VWR specifications can be found on vwr.com

The QR code will include details of the product number and batch; there is a direct link to our website to show our CoA and SDS linked to this product code.



27767.295 | Size: 1 KG

Lot: XXXXXXXXX | Use by: 00/0000

CAS: 497-19-8 | MW: 105,99 | Formula: CNa2O3
EC number: 207-838-8 | Density: 2,53 kg/l
Date opened:

Assay (calculated on dried substance)	99,5 –> 100,5 %
Appearance	White powder
Identification A	Passes test
Identification B	Passes test
Identification C	Passes test
Solution S	Passes test
Appearance of solution	Passes test
Alkali hydroxides and bicarbonates	Passes test
Cl (Chloride)	Max. 125 ppm
SO4 (Sulphate)	Max. 250 ppm
As (Arsenic)	Max. 5 ppm
Fe (Iron)	Max. 50 ppm
Heavy metals (as Pb)	Max. 50 ppm
Loss on drying (300°C)	Max. 1,0 %
Residual solvents	Unlikely by manuf.process

Ph.Eur.

Sodium carbonate anhydrous

Sodium carbonate anhydre
Natriumcarbonat wasserfrei
Sodio carbonato anhidro
Natriumcarbonaat watervrij
Sodio carbonato anidro
Sódio carbonato anhidro
Natriumkarbonat vattenfri
Natriumcarbonat vandfri

Warning - Causes serious eye irritation. Wear protective gloves/protective clothing/eye protection/face protection. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Attention - Provoque une sévère irritation des yeux. Porter des gants de protection/des vêtements de protection/un équipement de protection des yeux/du visage. EN CAS DE CONTACT AVEC LES YEUX: rincer avec précaution à l'eau pendant plusieurs minutes. Enlever les lentilles de contact si la victime en porte et si elles peuvent être facilement enlevées. Continuer à rincer.
Achtung - Verursacht schwere Augenreizung. Schutzhandschuhe/Schutzkleidung/Augenschutz/Gesich tragen. BEI KONTAKT MIT DEN AUGEN: Einige Minuten lang behutsam mit Wasser spülen. Vorhandene Kontaktlinsen nach Möglichkeit entfernen. Weiter spülen.
Atención - Provoca irritación ocular grave. Llevar guantes/prendas/gafas/máscara de protección. EN CASO DE CONTACTO CON LOS OJOS: Aclarar cuidadosamente con agua durante varios minutos. Quitar las lentes de contacto, si lleva y resulta fácil. Seguir aclarando.
Waarschuwing - Veroorzaakt ernstige oogirritatie. Beschermende handschoenen/beschermende kleding/oogbescherming/gelaatsbescherming dragen. BIJ CONTACT MET DE OGEN: voorzichtig afspoelen met water gedurende een aantal minuten; contactlenzen verwijderen, indien mogelijk; blijven spoelen.
Attenzione - Provoca grave irritazione oculare. Indossare guanti/indumenti protettivi/Proteggere gli occhi/il viso. IN CASO DI CONTATTO CON GLI OCCHI: sciacquare accuratamente per parecchi minuti. Togliere le eventuali lenti a contatto se è agevole farlo. Continuare a sciacquare.
Atenção - Provoca irritação ocular grave. Usar luvas de protecção/vestuário de protecção/protecção ocular/protecção facial. SE ENTRAR EM CONTACTO COM OS OLHOS: enxaguar cuidadosamente com água durante vários minutos. Se usar lentes de contacto, retire-as, se tal lhe for possível. Continuar a enxaguar.
Varning - Orsakar allvarlig ögonirritation. Använd skyddshandskar/skyddskläder/ögonskydd/ansiktsskydd VID KONTAKT MED ÖGONEN: Skölj försiktigt med vatten i flera minuter. Ta ur eventuella kontaktlinser om det går lätt. Fortsätt att skölja.
Advarsel - Forårsager alvorlig øjenirritation. Bær beskyttelseshandsker/beskyttelsestøj/øjenbeskyttel VED KONTAKT MED ØJNENE: Skyl forsigtigt med vand i flere minutter. Fjern eventuelle kontaktlinser, hvis dette kan gøres let. Fortsæt skylning.
H+P: -H319-P280-P305+P351+P338

For Specifications, C of A and SDS please go to vwr.com or scan the QR code on left. For Laboratory Use Only. Not for Drug, Food, or Household use.
Manufactured by: VWR International bvba Geldenaaksebaan 464 - B-3001 Leuven Belgium +3216385011

Made in Belgium

VWR® BDH® CHEMICALS

00001

GRADE SELECTION GUIDE

VWR laboratory reagents are available in wide range of different qualities to ensure you always have the right product for your application.

Colour	Grade/quality	Main applications/characteristics
●	HiPerSolv CHROMANORM®	HPLC: LC-UV, LC-MS and preparative applications
●	PESTINORM®	GC/GLC: ECD, PND, GC-MS applications including pesticide residue analysis
●	SpectrosoL / SPECTRONORM	Spectroscopy
●	ARISTAR® / NORMATOM®	High purity solvents, acids, reagents and standards for trace analysis (IC, ICP, ICP-MS)
●	Deuterated and anhydrous solvents	NMR spectroscopy, organic synthesis
●	Peptide synthesis solvents	Peptide synthesis
●	AnalaR® NORMAPUR® ACS, Reag. Ph. Eur.	Analytical grade reagents for the pharma industry, ACS standards and Reag. Ph. Eur. specifications
●	AnalaR® NORMAPUR®	Analytical grade reagents and standards
●	AVS TITRINORM / ConvoL NORMADOSE	Ready to use/concentrated solutions of analytical reagents for volumetric titration and calibration
●	Ph. Eur. and USP reagents	Range of standards and solutions specified in the Ph. Eur. for laboratory use
●	Standards	AAS, ASTM and Ph. Eur. colour standards, hydrocarbon oil index, conductivity, UV/Vis
●	Pharmacopoeia grade product	Products for pharmaceutical or biopharmaceutical production
●	GPR RECTAPUR®	Reagents for general laboratory use
●	LABWASH®	Cleaning products, for laboratory applications
●	TECHNICAL, TechniSolv®	Reagents with limited specification for general laboratory use
●	Indicator papers, strips, rolls, dyes including Dosatest® and Rota®	Test and pH papers dyes, dry and in solution
●	Electran	Electrophoresis reagents
●	Molecular biology	Reagents specified for use in molecular biology applications including auxiliaries like silica gel
●	For biochemistry	Biochemicals and enzymes
●	For microbiology	Ready to use and dehydrated culture media for microbiological applications
●	Q Path®	For cytological and histological use
●	Gurr	Stains and dyes for microscopy
●	Products for diagnostic work with tissue specimens	Reagents for classical haematology, cytology and histology
●	For environmental analysis	Powder pillows and reagents for environmental applications

Acetone HiPerSolv CHROMANORM® for HPLC

01 02 03

Filtered 0.2 µm filter. Packaged under nitrogen.



04 Danger 06

CAS 67-64-1 05 UN: 1090 07

CH_3COCH_3 **M.W.** 58,08 g/mol

08 **Boiling Pt:** 56,2 °C (1013 hPa) **Melting Pt:** -95,4 °C **Density:** 0,792 g/cm³ (20 °C)

Storage Temperature: Ambient 09 **REACh:** 01-2119471330-49

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Assay (on anhydrous substance)	Min. 99.8 %
Acidity	Max. 0.0005 meq/g
Alkalinity	Max. 0.0002 meq/g
Evaporation residue	Max. 5 ppm
Water	Max. 0.2 %
Absorbance (345 nm)	Max. 0.3
Absorbance (350 nm)	Max. 0.1
Absorbance (360 nm)	Max. 0.01
Transmittance (345 nm)	Min. 50 %
Transmittance (350 nm)	Min. 80 %
Transmittance (360 nm)	Min. 98 %

Pack type 11	Pk 12	Cat. No. 13
Glass bottle	1 l	20067.290
Glass bottle	2 l	20067.320
Glass bottle	4 l	20067.400

01. Colour coding to identify the grade and general application for a product
02. Substance
03. Product description including grade
04. GHS (CLP) hazard symbols
05. Chemical Abstract Service registry number (CAS number)
06. Signal word
07. UN hazard classification number
08. Formula and physical data
09. REACh registration
10. Guaranteed specification at time of going to press (for updates and batch results see vwr.com)
11. Normal packaging for this article
12. Sales unit (pack size)
13. Article code number to be used for ordering

FOR LATEST PRICES PLEASE CHECK VWR.COM

Our Life Science ranges

START PURE

Purity drives your results and your business. You need complete confidence in a life science supplier because your work and reputation depend on it. At VWR Life Science, we earn trust by demanding the highest standards of purity in all aspects of our products and services. VWR Life Science has more than 35 years of experience in serving the global life science community, from basic research to large scale production in biopharmaceutical and diagnostics.

Research pack sizes are provided for our R&D and academic customers, lot-specific bulk biochemicals and reagents are made to order for our manufacturing customers.

Convenient formats are available to make the best use of resources, and many products have been developed to minimise exposure and disposal of hazardous materials.

It all begins with purity, and we support that belief in everything we do. Let us help you make a difference in your work and our world.

When you start pure with VWR Life Science, anything is possible.



vwr.com/lifescience

MAJOR PRODUCT GROUPS

- Agaroses
- Acrylamides
- Amino acids
- Antibiotics and antimyotics
- Biological compounds
- Buffers
- Carbohydrates
- Chaotrophic agents
- Chelating agents
- Detergents
- Dyes and stains
- Enzymes
- Media
- Phenols / organics
- Preservatives
- Reagents
- Reducing agents
- Salts
- Substrates
- Sugars

MEETING THE CHALLENGE OF SCALE-UP AND MORE

The challenges of production include the scaling up of laboratory processes, processing and production management, personal and product safety. VWR are able to provide support in this environment from raw materials, to hygiene control. We can help you monitor your finished product and intermediates, handle the increasing volumes of materials and manage any effluent output.

Managing a chemical supply chain for customers involved in production has taught us that flexibility and high service levels are standard requirements in this environment.

Every day we deliver to customers who rely on us to get the right product to them at the right time, with the right documentation.

VWR offers a wide range of Pharmacopoeia compliant materials, all fully tested and documented to the required standards. All Pharmacopoeia materials are packed in controlled environments following the principles of GMP.

Change control security
If your application with a VWR Pharmacopoeia or custom chemical requires change control please contact us.

Customer audits
We welcomes audits of our facilities and processes by customers. However, the demand for such events is high, so we ask customers to make such requests several months in advance. Requests should be made through your local VWR organisation.



vwr.com/production

WE CAN DELIVER ... YOUR SPECIFICATION, YOUR PACK REQUIREMENTS AND YOUR TIMESCALE

Your goal is to carry out your research, production or quality control in the most efficient and safe way possible. Our goal is to provide services and products that will guarantee you can increase your success and productivity.

VWR has a long history of servicing requests for custom products. This capability is based on our production sites around the world, with the aim of providing good quality materials at a competitive price.

Ready to use custom products provide the following benefits:

- Increased time to focus on your day-to-day work
- Guaranteed conformity to labelling and other regulatory requirements
- Increased batch-to-batch reproducibility and accuracy giving more consistent results
- Increased safety for your staff
- Reduced exposure to carcinogenic, mutagenic or toxic substances for reproduction products
- Reduced inventory of toxic substances

Please note, VWR does have minimum order requirements for all custom requests. For more information please contact your local VWR sales office with your full requirements.

Enhance your productivity with custom manufacturing



vwr.com/cms/vwr_custom_manufacturing_services

Constant innovation

We're adding new products all the time! Here are some recent highlights.

SOLVENTS

VWR CHEMICALS HIPERSOLV CHROMANORM® SOLVENTS, ADDITIVES AND MIXES FOR LC-MS

High purity solvents and reagents to meet the highly demanding requirements of HPLC LC-MS.

- High UV performance
- Very low alkaline metal content
- Filtred at 0,2 µm and bottled under nitrogen
- Fitted with caps containing PTFE liners to prevent contamination



MORE INFO ON LC-MS AT VWR.COM

Solvents for LC-MS

Description	Pk	Cat. No.
Acetonitrile HiPerSolv CHROMANORM® Ultra LC-MS	1 l	83642.290
n-Heptane 99%, HiPerSolv CHROMANORM® for LC-MS	1 l	84899.290
n-Heptane 99%, HiPerSolv CHROMANORM® for LC-MS	2,5 l	84899.320
n-Hexane 99%, HiPerSolv CHROMANORM® for LC-MS	1 l	85799.290
n-Hexane 99%, HiPerSolv CHROMANORM® for LC-MS	2,5 l	85799.320
Methanol HiPerSolv CHROMANORM® Ultra Plus	1 l	85855.290
Methanol HiPerSolv CHROMANORM® Ultra Plus	2,5 l	85855.320

Mixes for LC-MS and HPLC

Description	Pk	Cat. No.
Acetonitrile with 0,05% TFA HiPerSolv CHROMANORM® for HPLC	2,5 l	84863.320
Methanol with 0,1% acetic acid HiPerSolv CHROMANORM® for LC-MS	1 l	84895.290
Methanol with 0,1% acetic acid HiPerSolv CHROMANORM® for LC-MS	2,5 l	84895.320
Methanol with 0,1% formic acid HiPerSolv CHROMANORM® for LC-MS	1 l	84896.290
Methanol with 0,1% formic acid HiPerSolv CHROMANORM® for LC-MS	2,5 l	84896.320
Methanol with 0,1% formic acid & ammonium formate 2 mM HiPerSolv CHROMANORM® for LC-MS	2,5 l	85959.320
Water with 0,1% formic acid & ammonium formate 2 mM HiPerSolv CHROMANORM® for LC-MS	2,5 l	85960.320
Wash solution: ACN/methanol/IPA/water (25:25: 25:25) HiPerSolv CHROMANORM® for LC-MS	1 l	84897.290
Wash solution: ACN/methanol/IPA/water (25:25: 25:25) HiPerSolv CHROMANORM® for LC-MS	2,5 l	84897.320
Wash solution: 2-Propanol/water (50:50) HiPerSolv CHROMANORM® for LC-MS	1 l	84898.290
Wash solution: 2-Propanol/water (50:50) HiPerSolv CHROMANORM® for LC-MS	2,5 l	84898.320

Additives for LC-MS

Description	Pk	Cat. No.
Trifluoroacetic acid 100%, HiPerSolv CHROMANORM® for LC-MS	10 ml	85049.010
Trifluoroacetic acid 100%, HiPerSolv CHROMANORM® for LC-MS	5x10 ml	85049.051
Formic acid HiPerSolv CHROMANORM® for LC-MS	10 ml	85048.010
Formic acid HiPerSolv CHROMANORM® for LC-MS	5x10 ml	85048.051

VWR CHEMICALS HIPERSOLV CHROMANORM® SOLVENTS FOR HPLC

A complete range of 200 l returnable drums have been introduced for production purification or preparative HPLC.

An extensive range of ion-pair reagents for HPLC gradient elution which exibit minimal extinction in the low UV region, and excellent transparency down to 200 nm, even at high concentrations.

Also for acetate buffers, a new acetic acid has been included.



VISIT VWR.COM FOR MORE INFO

HPLC reagents

Description	Pk	Cat. No.
Acetonitrile HiPerSolv CHROMANORM® Reag. Ph. Eur. / USP super gradient grade for HPLC	185 l	83639.500
Acetonitrile HiPerSolv CHROMANORM® Reag. Ph. Eur. / USP super gradient grade for HPLC	1000 l	83639.911
Methanol HiPerSolv CHROMANORM® gradient grade for HPLC	185 l	20864.500
Methanol HiPerSolv CHROMANORM® gradient grade for HPLC	1000 l	20864.911
Methanol HiPerSolv CHROMANORM® super gradient grade for HPLC	185 l	85681.500
Methanol HiPerSolv CHROMANORM® super gradient grade for HPLC	1000 l	85681.911

Buffers for HPLC

Description	Pk	Cat. No.
Acetic acid >99.8% HiPerSolv CHROMANORM® for HPLC	500 ml	87023.260
Acetic acid >99.8% HiPerSolv CHROMANORM® for HPLC	1 l	87023.290

Ion-pair reagents

Description	Pk	Cat. No.
1-Butanesulphonic acid sodium salt	25 g	85790.150
1-Dodecanesulphonic acid sodium salt	25 g	85791.150
1-Dodecylhydrogensulphate sodium salt	25 g	85798.150
Tetrabutylammonium hydrogen sulphate	25 g	85794.150
Decane-1-sulphonic acid sodium salt	25 g	85792.150
Lithium dodecyl sulphate	25 g	85793.150

VWR CHEMICALS PESTINORM® SOLVENTS FOR GC

The range has been extended with more than 10 new PESTINORM solvents.

Due to their high quality, our PESTINORM® SUPRA TRACE solvents can be used for every detection methods (GC-ECD, GC-FID, GC-MS) or for sensitive research.

- Very high purity (>99,9%)
- High reliability
- Residue on evaporation <3 ppm
- Supplied in 1 or 2,5 l bottles



MORE INFO ON PESTINORM® AT VWR.COM

PESTINORM® solvents

Description	Pk	Cat. No.
Tert-butyl methyl ether PESTINORM®	1 l	85932.290
Tert-butyl methyl ether PESTINORM®	2,5 l	85932.320
Ethanol PESTINORM®	1 l	85933.290
Ethanol PESTINORM®	2,5 l	85933.320
N,N-Dimethylformamide PESTINORM®	1 l	85936.290
N,N-Dimethylformamide PESTINORM®	2,5 l	85936.320
Isohexane PESTINORM ®	2,5 l	85934.320

PESTINORM® SUPRA TRACE solvents

Description	Pk	Cat. No.
Acetonitrile PESTINORM® SUPRA TRACE solvents	2,5 l	85935.320
Chloroform PESTINORM® SUPRA TRACE solvents	1 l	85853.290
Chloroform PESTINORM® SUPRA TRACE solvents	2,5 l	85853.320
Dichloromethane PESTINORM® for MOSH/MOAH analysis	2,5 l	85958.320
n-Hexane 99%, PESTINORM® for MOSH/MOAH analysis	2,5 l	85957.320
n-Pentane 99%, PESTINORM® SUPRA TRACE solvents	1 l	85852.290
n-Pentane 99%, PESTINORM® SUPRA TRACE solvents	2,5 l	85852.320
2,2,4-Trimethylpentane PESTINORM® SUPRA TRACE solvents	1 l	85801.290
2,2,4-Trimethylpentane PESTINORM® SUPRA TRACE solvents	2,5 l	85801.320

VWR CHEMICALS ANHYDROUS SOLVENTS FOR ORGANIC SYNTHESIS

Extended range of products in 500 ml (septum sealed) and 8 new products.

- High quality
- Septum cap on 250 and 500 ml pack features, '6 in 1', with resealable puncture points
- Guaranteed low moisture level and high purity
- Very low content



MORE INFO ON ANHYDROUS AT VWR.COM

Anhydrous solvents

Description	Pk	Cat. No.
Acetone anhydrous (max. 0,01% H_2O)	500 ml	**83683.269**
Acetonitrile anhydrous (max. 0,001% H_2O)	500 ml	**83676.269**
tert Butyl methyl ether anhydrous (max. 0,005% H_2O)	250 ml	**85814.230**
tert Butyl methyl ether anhydrous (max. 0,005% H_2O)	500 ml	**85814.269**
Chloroform anhydrous (max. 0,005% H_2O)	250 ml	**85815.230**
Chloroform anhydrous (max. 0,005% H_2O)	500 ml	**85815.269**
Diethyl ether anhydrous (max. 0,005% H_2O)	500 ml	**85022.269**
Dichloromethane anhydrous (max. 0,001% H_2O)	500 ml	**83682.269**
N,N-Dimethylacetamide anhydrous (max. 0,005% H_2O)	250 ml	**85817.230**
N,N-Dimethylacetamide anhydrous (max. 0,005% H_2O)	500 ml	**85817.269**
N,N-Dimethylyformamide anhydrous (max. 0,005% H_2O)	250 ml	**83675.230**
N,N-Dimethylyformamide anhydrous (max. 0,005% H_2O)	500 ml	**83675.269**
Dimethylsulphoxide anhydrous (max. 0,005%)	500 ml	**83673.269**
Ethyl acetate anhydrous (max. 0.005% H_2O)	500 ml	**83681.269**
n-Heptane 99%, anhydrous (max. 0,003% H_2O)	250 ml	**85818.230**
n-Heptane 99%, anhydrous (max. 0,003% H_2O)	500 ml	**85818.269**
n- Hexane 99%, anhydrous (max. 0,003% H_2O)	250 ml	**85819.230**
n- Hexane 99%, anhydrous (max. 0,003% H_2O)	500 ml	**85819.269**
Methanol anhydrous (max. 0,002% H_2O)	500 ml	**83679.269**
2-Methytetrahydrofuran anhydrous (max. 0,003% H_2O)	250 ml	**85820.230**
2-Methytetrahydrofuran anhydrous (max. 0,003% H_2O)	500 ml	**85820.269**
2-Propanol anhydrous (max. 0,003% H_2O)	500 ml	**83677.269**
Pyridine anhydrous (max. 0,003% H_2O)	500 ml	**83684.269**
Toluene anhydrous (max. 0,002% H_2O)	500 ml	**83680.269**

ANALYTICAL GRADE AND GENERAL PURPOSE SOLVENTS

Many new products available in these 3 grades, AnalaR® NORMAPUR®, GPR RECTAPUR® and TECHNICAL for analytical and general purposes.



Analytical grade solvents

Description	Pk	Cat. No.
Acetonitrile AnalaR® NORMAPUR® ACS, Reag. Ph. Eur.	200 l	20071.550
n-Butyl acetate AnalaR® NORMAPUR® ACS, Reag. Ph. Eur.	10 l	22087.410
n-Butyl acetate AnalaR® NORMAPUR® ACS, Reag. Ph. Eur.	25 l	22087.460
tert-Butyl methyl ether AnalaR® NORMAPUR® ACS	200 l	85027.550
Carbon disulfide for analysis, AnalaR NORMAPUR ACS, Reag.Ph.Eur.	1 l	85972.290
Carbon disulfide GPR RECTAPUR®	1 l	85974.290
Chloroform AnalaR® NORMAPUR® ACS, Reag. Ph. Eur.	190 l	22711.540
Dichloromethane AnalaR® NORMAPUR®	190 l	23354.550
Diisopropylamine ≥99,0% GPR RECTAPUR®	25 l	87031.460
Diisopropyl ether AnalaR® NORMAPUR® ACS, Reag. Ph. Eur.	10 l	24900.410
Diisopropyl ether AnalaR® NORMAPUR® ACS, Reag. Ph. Eur.	2,5 l	24900.320
N,N-Dimethylformamide AnalaR® NORMAPUR® ACS, Reag. Ph. Eur.	200 l	23466.550
Ethanolamine AnalaR® NORMAPUR® ACS	1 l	85955.290
Ethanolamine AnalaR® NORMAPUR® ACS	2,5 l	85955.320
Ethyl acetate AnalaR® NORMAPUR® ACS, Reag. Ph. Eur.	200 l	23882.550
Ethylene glycol monoethyl ether AnalaR® NORMAPUR® ACS, Reag Ph. Eur	1 l	85956.290
Ethylene glycol monoethyl ether AnalaR® NORMAPUR® ACS, Reag Ph. Eur	2,5 l	85956.320
n-Heptane AnalaR® NORMAPUR®	200 l	24551.550
n-Hexane 99%. AnalaR® NORMAPUR®	25 l	24608.460
Isohexane AnalaR® NORMAPUR® ACS	1 l	85759.290
Isohexane AnalaR® NORMAPUR® ACS	2,5 l	85759.320
Tetrahydrofuran AnalaR® NORMAPUR® ACS, Reag. Ph. Eur.	200 l	28551.550
Tetrachloroethylene Spectronorm® for spectroscopy	2.5l	83950.320



MORE INFO ON ALCOHOLS AT VWR.COM

Alcohols and alcohols eurodenatured

Description	Pk	Cat. No.
Ethanol eurodenatured 99% TechniSolv® (1:1:1)	5 l	85823.360
Ethanol eurodenatured 99% TechniSolv® (1:1:1)	20 l	85823.440
Ethanol eurodenatured 96% TechniSolv® (1:1:1)	5 l	85824.360
Ethanol eurodenatured 96% TechniSolv® (1:1:1)	20 l	85824.440
Ethanol eurodenatured 70% TechniSolv® (1:1:1)	5 l	85825.360
Ethanol eurodenatured 70% TechniSolv® (1:1:1)	20 l	85825.440
Ethanol eurodenatured 80% TechniSolv® (1:1:1)	20 l	85828.440
Ethanol 96% eurodenatured (1:1:1) GPR RECTAPUR®	1 l	85829.290
Ethanol 96% eurodenatured (1:1:1) GPR RECTAPUR®	2,5 l	85829.320
Ethanol 96% eurodenatured (1:1:1) GPR RECTAPUR®	5 l	85829.360
Ethanol 96% eurodenatured (1:1:1) GPR RECTAPUR®	10 l	85829.410
Ethanol 96% eurodenatured (1:1:1) GPR RECTAPUR®	25 l	85829.460
Ethanol 96% eurodenatured (1:1:1) GPR RECTAPUR®	200 l	85829.550
Ethanol 99% eurodenatured (1:1:1) GPR RECTAPUR®	1 l	85830.290
Ethanol 99% eurodenatured (1:1:1) GPR RECTAPUR®	200 l	85830.550
Ethanol 99% eurodenatured (1:1:1) GPR RECTAPUR®	5 l	85830.360
Ethanol 99% eurodenatured (1:1:1) GPR RECTAPUR®	10 l	85830.410
Ethanol 99% eurodenatured (1:1:1) GPR RECTAPUR®	25 l	85830.460
2-Propanol 70% (v/v) GPR RECTAPUR®	1 l	86123.290
2-Propanol 70% (v/v) GPR RECTAPUR®	5 l	86123.360
2-Propanol 70% (v/v) GPR RECTAPUR®	10 l	86123.410
2-Propanol 70% (v/v) GPR RECTAPUR®	25 l	86123.460
2-Propanol TECHNICAL	5 l	20922.368

ACIDS

NORMATOM® ACIDS FOR METAL TRACE ANALYSIS

New NORMATOM® acids have been added for the most exacting sample preparation in ICP/ICP-MS or AAS.

For Ultrapure NORMATOM® grade, metal impurities are in ppt.



NORMATOM® Acids

Description	Pk	Cat. No.
Acetic acid 99%, Ultrapure NORMATOM®	250 ml	85030.230
Ammonia 25%, NORMATOM®	500 ml	85693.270
Ammonia 25%, NORMATOM®	1 l	85693.290
Ammonia 25%, NORMATOM®	2,5 l	85693.320
Ammonia 20%, Ultrapure NORMATOM®	250 ml	85031.230
Hydrochloric acid 32%, Ultrapure NORMATOM®	250 ml	83878.230
Hudrofluoric acid 47%, Ultrapure NORMATOM®	250 ml	85029.230
Nitric acid 67%, Ultrapure NORMATOM®	250 ml	83879.230
Perchloric acid 65 - 71%, NORMATOM®	2,5 l	83874.320
Perchloric acid 65 - 71%, ultrapure NORMATOM®	250 ml	85822.230
Sulphuric acid 93%, Ultrapure NORMATOM®	250 ml	85028.230

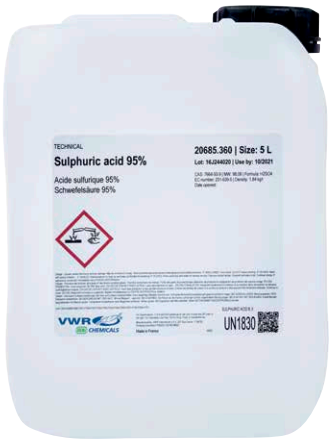
ANALYTICAL GRADE AND GENERAL PURPOSE ACIDS, ALKALIS AND SALTS

Many new products and pack sizes in AnalaR® NORMAPUR®, GPR RECTAPUR® and TECHNICAL grades have been added.



Acids, alkalis and salts

Description	Pk	Cat. No.
Amidosulphonic acid AnalaR® NORMAPUR®	100 g	20672.187
Amidosulphonic acid AnalaR® NORMAPUR®	200 g	20672.230
Amidosulphonic acid AnalaR® NORMAPUR®	1 kg	20672.297
Amidosulphonic acid GPR RECTAPUR®	25 kg	20675.460
Ammonia 10%, AnalaR® NORMAPUR®	5 l	190063U
di-Ammonium hydrogen citrate AnalaR® NORMAPUR® ACS, Reag. Ph. Eur.	1 kg	21246.290
di-Ammonium hydrogen citrate AnalaR® NORMAPUR® ACS, Reag. Ph. Eur.	2,5 kg	21246.320
di-Ammonium hydrogen citrate AnalaR® NORMAPUR® ACS, Reag. Ph. Eur.	25 kg	21246.460
Barbituric acid AnalaR® NORMAPUR®	25 g	86178.130
Barbituric acid AnalaR® NORMAPUR®	100 g	86178.180
Chloromine-T $3H_2O$ AnalaR® NORMAPUR® ACS, Reag. Ph. Eur.	250 g	22686.230
Chloramine-T $3H_2O$ GPR RECTAPUR®	500 g	22685.265
Chloramine-T $3H_2O$ GPR RECTAPUR®	5 kg	22685.360
Chloramine-T $3H_2O$ GPR RECTAPUR®	25 kg	22685.460
Copper (II) oxide powder AnalaR® NORMAPUR®	500 g	84148.260
Cobalt (II) nitrate $6H_2O$ AnalaR® NORMAPUR®	100g	87024.180
Cobalt (II) nitrate hexahydrate (max.0.001% Ni), AnalaR® NORMAPUR® ACS	250 G	87027.230
Diethylenetriamine pentaacetic acid AnalaR® NORMAPUR®	100 g	86179.180
Formic acid 99 - 100% AnalaR® NORMAPUR® ACS, Reag. Ph. Eur.	100 ml	20318.180
Formic acid 99 - 100% AnalaR® NORMAPUR® ACS, Reag. Ph. Eur.	1 l	20318.310
Formic acid 99 - 100% AnalaR® NORMAPUR® ACS, Reag. Ph. Eur.	200 l	20318.550
Glycolic acid AnalaR® NORMAPUR®	100 g	87061.180
Glycolic acid AnalaR® NORMAPUR®	250 g	87061.230
Glycolic acid AnalaR® NORMAPUR®	1 kg	87061.290



Description	Pk	Cat. No.
Hydrochloric acid 20%, AnalaR® NORMAPUR®	1 l	5853.1000
Hydrochloric acid 20%, AnalaR® NORMAPUR®	5 l	5853.5000
Hypophosphorous acid 50%, AnalaR® NORMAPUR®	500 ml	86169.260
Iron (III) chloride anhydrous GPR RECTAPUR®	500 g	24216.268
Iron (III) chloride anhydrous GPR RECTAPUR®	5 kg	24216.361
Iron (III) chloride anhydrous GPR RECTAPUR®	25 kg	24216.460
Mercury AnalaR® NORMAPUR® for polarography	100 g	85967.180
Mercury AnalaR® NORMAPUR® for polarography	500 g	85967.260
Mercury (II) nitrate monohydrate AnalaR® NORMAPUR®	100 g	86176.180
Mercury, GPR RECTAPUR®, Reag Ph Eur	250 g	86136.230
Mercury (II) thiocyanate AnalaR® NORMAPUR® ACS, Reag Ph.Eur.	25 g	85965.130
Mercury (II) thiocyanate AnalaR® NORMAPUR® Reag Ph.Eur.	100 g	85965.180
Mercury (II) bromide AnalaR® NORMAPUR® ACS	50 g	86147.150
Molybdatophosphoric acid hydrate AnalaR® NORMAPUR® ACS, Reag. Ph. Eur.	25 g	20616.138
Nitric acid fuming 99% AnalaR® NORMAPUR®	500 ml	85850.270
Nitric acid 52,5% AnalaR® NORMAPUR®	25 l	20420.462
Nitric acid 69% AnalaR® NORMAPUR® ACS, Reag. Ph. Eur.	200 l	20425.550
di-Phosphorus pentoxide GPR RECTAPUR	1 kg	21410.293
Potassium iodate AnalaR® NORMAPUR® ACS, Reag. Ph. Eur.	100 g	26840.180
Potassium heaxacynaferrate (II) 3 H_2O GPR RECTAPUR®	25 kg	26815.460
Potassium hexahydroxoantimonate (V) for analysis, AnalaR® NORMAPUR®	100 g	86173.180
Potassium hydrogen sulphate GPR RECTAPUR®	25 kg	27011.460
Sodium cyanide GPR RECTAPUR®	1 kg	87056.290
Sodium cyanide GPR RECTAPUR®	5 kg	87056.360
Sodium cyanide GPR RECTAPUR®	25 kg	87056.460
Sodium hexanitrocobaltate (III) AnalaR® NORMAPUR® ACS, Reag. Ph. Eur.	25 g	86175.130
Sodium hexanitrocobaltate (III) AnalaR® NORMAPUR® ACS, Reag. Ph. Eur.	100 g	86175.180
Sodium metaperiodate AnalaR® NORMAPUR® ACS, Reag. Ph. Eur.	100 g	27985.185
Sodium metaperiodate AnalaR® NORMAPUR® ACS, Reag. Ph. Eur.	250 g	27985.230
Sodium metaperiodate AnalaR® NORMAPUR® ACS, Reag. Ph. Eur.	1 kg	27985.290
Sodium metaperiodate GPR RECTAPUR®	250 g	27986.235
Sodium metaperiodate GPR RECTAPUR®	1 kg	27986.290
Sodium metaperiodate GPR RECTAPUR®	25 kg	27986.460
Sodium molybdate dihydrate GPR RECTAPUR®	25 kg	27936.460
Sodium perchlorate monohydrate AnalaR® NORMAPUR®	100 g	27988.180
Sulphuric acid fuming 65% SO3 GPR RECTAPUR®	2x1 l	86153.290
Sulphuric acid 50% TECHNICAL	25 l	20696.460

ORGANICS

Organic synthesis is still really important in research to help to discover new molecules. We have many new products to support you from research to production.



Organics

Description	Pk	Cat. No.
Benzoyl chloride GPR RECTAPUR®	1 l	87035.290
Benzoyl chloride GPR RECTAPUR®	25 l	87035.460
Diisopropylamine >99% GPR RECTAPUR®	1 l	87031.290
Diisopropylamine ≥99.0% GPR RECTAPUR®	2,5 l	87031.320
Diisopropylamine >99% GPR RECTAPUR®	25 l	87031.460
2-(Dimethyamino) ethanol GPR RECTAPUR®	1 l	86143.290
2-(Dimethyamino) ethanol GPR RECTAPUR®	25 l	86143.460
N,N Dimethyl P toluidine GPR RECTAPUR®	250 ml	85986.230
N,N Dimethyl P toluidine GPR RECTAPUR®	1 l	85986.290
N,N Dimethyl P toluidine GPR RECTAPUR®	25 l	85986.460
Glutaraldehyde (50% solution in water) GPR RECTAPUR®	100 ml	20876.180
Glutaraldehyde (50% solution in water) GPR RECTAPUR®	1 l	20876.290
Glutaraldehyde (50% solution in water) GPR RECTAPUR®	25 l	20876.460
Glutaraldehyde (25% solution in water) GPR RECTAPUR®	100 ml	20873.180
Glutaraldehyde (25% solution in water) GPR RECTAPUR®	1 l	20873.290
Glutaraldehyde (25% solution in water) GPR RECTAPUR®	2,5 l	20873.320
Glutaraldehyde (25% solution in water) GPR RECTAPUR®	25 l	20873.460
Maleic acid GPR RECTAPUR®	100 g	85968.180
Maleic acid GPR RECTAPUR®	1 kg	85968.290
Maleic acid GPR RECTAPUR®	5 kg	85968.360
Maleic acid GPR RECTAPUR®	25 kg	85968.460
Methyl methacrylate GPR RECTAPUR®	1 l	25600.296
Methyl methacrylate GPR RECTAPUR®	2,5 l	25600.320
Phosphoryl chloride GPR RECTAPUR®	250 ml	87036.230
Phosphoryl chloride GPR RECTAPUR®	1 l	87036.290
Sodium borohydride GPR RECTAPUR®	25 g	27885.134
Sodium borohydride GPR RECTAPUR®	100 g	27885.180
Sodium tetrahydroborate ≥98%, GPR RECTAPUR®	25 g	27885.134
Sodium tetrahydroborate ≥98%, GPR RECTAPUR®	100 g	27885.180
Tributylphosphate GPR RECTAPUR®	1 l	28726.291
Tributylphosphate GPR RECTAPUR®	2,5 l	28726.320

PHARMACOPEIA REAGENTS

This selection of new raw materials and chemicals for pharmaceutical production (compliance with the European Pharmacopoeia and/or other Pharmacopoeia are indicated in the specifications for each product).



Substances

Description	Pk	Cat. No.
Ammonium sulphate ≥99,0% NF, ACS	1 kg	6496.1000
Ammonium sulphate ≥99,0% NF, ACS	5 kg	6496.5000
Ammonium sulphate ≥99,0% NF, ACS	25 kg	6496.9025
Calcium chloride dihydrate 99,0 - 103,0% Ph. Eur., USP, JP, BP	1 kg	6495.1000
Calcium chloride dihydrate 99,0 - 103,0% Ph. Eur., USP, JP, BP	25 kg	6495.9025
D-(+)-Galactose ≥97,0% Ph. Eur.	1 kg	3441.1000
D-(+)-Galactose ≥97,0% Ph. Eur.	5 kg	3441.5000
D-(+)-Galactose ≥97,0% Ph. Eur.	25 kg	3441.9025
Glycerine 85% Ph. Eur.	1 l	24384.290
Glycerine 85% Ph. Eur.	25 l	24384.460
Glycerine 85% Ph. Eur.	200 l	24384.550
Iodine Ph. Eur.	1 kg	24762.290
Magnesium sulphate heptahydrate Ph. Eur.	1 kg	25167.298
Magnesium sulphate heptahydrate Ph. Eur.	5 kg	25167.367
Magnesium sulphate heptahydrate Ph. Eur.	25 kg	25167.460
Manganese (II) sulphate 1 H_2O Ph. Eur., USP	1 kg	6512.1000
Manganese (II) sulphate 1 H_2O Ph. Eur., USP	12 Kg	6512.9012
D-(-)-Mannitol 97,0 - 102,0% Ph. Eur., USP	25 l	25311.468
Methanol ≥99,5% Ph. Eur., NF, BP	2,5 l	6520.2500
Methanol ≥99,5% Ph. Eur., NF, BP	25 l	6520.9025
Methanol ≥99,5% Ph. Eur., NF, BP	200 l	6520.9200
Potassium dihydrogen phosphate Ph. Eur., NF, BP	1 kg	26921.295
Potassium dihydrogen phosphate Ph. Eur., NF, BP	5 kg	26921.364
Potassium dihydrogen phosphate Ph. Eur., NF, BP	25 kg	26921.466
2-Propanol ≥99,0% Ph. Eur., USP	5 l	20904.360
2-Propanol ≥99,0% Ph. Eur., USP	25 l	20904.470
2-Propanol ≥99,0% Ph. Eur., USP	200 l	20904.555
Sodium carbonate 10 H_2O Ph. Eur.	25 kg	27761.460
Disodium hydrogen phosphate 12 H_2O Ph. Eur.	25 kg	28035.460
Sodium sulphate anhydrous Ph. Eur., USP	1 kg	28105.295
Sodium sulphate anhydrous Ph. Eur., USP	5 kg	28105.364
Sodium sulphate anhydrous Ph. Eur., USP	25 kg	28105.466
D(+)-Trehalose 2 H_2O Ph. Eur., NF	100 g	3599.0100
D(+)-Trehalose 2 H_2O Ph. Eur., NF	1 kg	3599.1000
D(+)-Trehalose 2 H_2O Ph. Eur., NF	5 kg	3599.5000
D(+)-Trehalose 2 H_2O Ph. Eur., NF	25 kg	3599.9025
Water purified Ph. Eur., USP, NF, JP	5 l	90200.5000

Solutions for biopharma

Description	Pk	Cat. No.
Acetic acid 30%	2,5 l	6516.2500
Acetic acid 30%	25 l	6516.9025
Acetic acid 75%	2,5 l	6519.2500
Acetic acid 75%	25 l	6519.9025
Acetic acid 1 mol/l	2,5 l	6517.2500
Acetic acid 1 mol/l	25 l	6517.9025
Hydrochloric acid 1 mol	2,5 l	85447.320
Hydrochloric acid 1 mol	25 l	85447.460
Hydrochloric acid 2 mol	2,5 l	85399.320
Hydrochloric acid 2 mol	25 l	85399.460
Hydrochloric acid 5 mol	2,5 l	85400.320
Hydrochloric acid 5 mol	25 l	85400.460
Hydrochloric acid 6 mol	2,5 l	85401.320
Hydrochloric acid 6 mol	25 l	85401.460
Hydrochloric acid 10% Ph. Eur	10 l	5594.9010
Hydrochloric acid 10% Ph. Eur	210 kg	5594.9200
Sodium hydroxide 0,1 mol/l	2,5 l	85519.320
Sodium hydroxide 0,1 mol/l	25 l	85519.460
Sodium hydroxide 0,5 mol/l	2,5 l	85520.320
Sodium hydroxide 0,5 mol/l	25 l	85520.460
Sodium hydroxide 2 mol/l	2,5 l	85521.320
Sodium hydroxide 2 mol/l	25 l	85521.460
Sodium hydroxide 6 mol/l	2,5 l	85522.320
Sodium hydroxide 6 mol/l	25 l	85522.460
Sodium hydroxide 25%	2,5 l	85523.320
Sodium hydroxide 25%	25 l	85523.460
Sodium hydroxide 50%	2,5 l	85524.320
Sodium hydroxide 50%	25 l	85524.460

STANDARDS

Equipment calibration is essential to avoid incorrect results that can lead to serious consequences.

Many new products such as ICP and ion chromatography multi-element solutions, conductivity standards in sachets, UV/Vis kits, coloured standards, Brix standards and others are also now available.



MORE INFO ON STANDARDS AT VWR.COM

METAL TRACE ANALYSIS

ICP single-element solutions

Description	Pk	Cat. No.
Arsenic 10000 ppm for ICP	100 ml	455052M
Antimony 10000 ppm for ICP-MS ARISTAR®	100 ml	457002K
Bismuth10000 ppm for ICP	100 ml	455112H
Cesium 10000 ppm for ICP	500 ml	455214M
Cobalt 10000 ppm for ICP-MS ARISTAR®	100 ml	457062W
Copper 10000 ppm for ICP	100 ml	455292D
Lead 10000 ppm for ICP	100 ml	455572Y
Lead 10000 ppm for ICP	500 ml	455574K
Lithium 10000 ppm for ICP	100 ml	455592M
Lutetium 1000 ppm for ICP-MS ARISTAR®	100 ml	457336F
Mercury 1000 ppm for ICP	500 ml	455664L
Palladium 1000 ppm for ICP	500 ml	455764X
Phosphorous 10000 ppm for ICP-MS ARISTAR®	100 ml	457112P
Rhenium 1000 ppm for ICP-MS ARISTAR®	100 ml	457404N
Scandium 1000 ppm for ICP	500 ml	455964U
Silver 1000 ppm for ICP-MS ARISTAR®	100 ml	456892C
Terbium 1000 ppm for ICP	100 ml	456142R
Thallium 10000 ppm for ICP	100 ml	456172A
Vanadium 10000 ppm for ICP	500 ml	456334A

Ion Chromatography multi-element solutions

Description	Pk	Cat. No.
ICP multi-element standard XIII (15 elements)	100 ml	87045.180
ICP multi-element standard XI (7 elements)	100 ml	87046.180
ICP multi-element standard VIII (24 elements)	100 ml	87047.180
ICP multi-element standard X (23 elements)	100 ml	87044.180
ICP multi-element standard IX (9 elements)	100 ml	87048.180
ICP multi-element standard XVII (7 elements)	100 ml	87049.180

IC solutions

Description	Pk	Cat. No.
IC Anion multi-element standard I	500 ml	87037.260
IC Anion multi-element standard II	500 ml	87038.260
IC Anion multi-element standard I	500 ml	87039.260
IC Anion multi-element standard V	500 ml	87040.260
IC Cation multi-element standard VII acc. to EN ISO 14911	500 ml	87041.180
IC Cation multi-element standard VII acc. to EN ISO 14911	500 ml	87042.180





ELECTROCHEMISTRY

Volumetric standards for titration

Description	Pk	Cat. No.
Benzoic acid, secondary standard	80 g	85682.080
Calcium carbonate, secondary standard	60 g	85683.060
Di-sodium oxalate, secondary standard	80 g	85684.080
Potassium hydrogen phthalate, secondary standard	100 g	85685.100
Potassium chloride, secondary standard	100 g	85686.100
Potassium dichromate, secondary standard	100 g	85687.100
Potassium iodate, secondary standard	100 g	85688.100
Sodium chloride, secondary standard	100 g	85689.100
Tris-(hydroxymethyl)-aminomethane, secondary standard	80 g	85690.080

Karl Fischer standards

Description	Pk	Cat. No.
Di-sodium tartrate dihydrate standard	100 g	85692.100
Lactose standard 5% solid water standard	100 g	85449.100

pH buffers in sachets

Description	Pk	Cat. No.
Buffer pH 2,00 (20 °C) AVS TITRINORM®	Kit (30x30 ml)	85937.001
Buffer pH 6,00 (20 °C) AVS TITRINORM®	Kit (30x30 ml)	85938.001
Buffer pH 11,00 (20 °C) AVS TITRINORM®	Kit (30x30 ml)	85950.001
Buffer pH 12,00 (20 °C) AVS TITRINORM®	Kit (30x30 ml)	85951.001

Conductivity standards

Description	Pk	Cat. No.
Conductivity standard 15 µS/cm (25 °C)	500 ml	84107.260
Conductivity standard 20000 µS/cm (25 °C)	500 ml	84149.260
Conductivity standard 111800 µS/cm (25 °C)	500 ml	84108.260
Conductivity standard 1410 µS/cm (25 °C) - solutions in sachets	Kit (30x30 ml)	85953.001
Conductivity standard 12880 µS/cm (25 °C) - solutions in sachets	Kit (30x30 ml)	85954.001



PHYSICAL PROPERTY STANDARDS

UV/Vis

Description	Pk	Cat. No.
UV/Vis standard 1 - for absorbance control	Kit	86124.001
UV/Vis standard 1A - for absorbance control	Kit	86125.001
UV/Vis standard 2 - for stray light testing	Kit	86126.001
UV/Vis standard 3 - for stray light testing	Kit	86127.001
UV/Vis standard 4 - for stray light testing	Kit	86128.001
UV/Vis standard 5 - toluene/hexane solution for resolution power testing	Kit	86129.001
UV/Vis standard 6 - for wavelength testing	Kit	86130.001
Potassium dichromate solution 0,01 N in sulphuric acid for the calibrating the absorbance of spectrophotometers	Kit	85969.001
Holmium perchlorate standard solution for the calibrating of spectrophotometers	3x10 ml	85970.030
Holmium perchlorate standard solution for the calibrating of spectrophotometers	100 ml	85970.180

COLOR STANDARDS

All the colour standards kits are according to Ph.Eur.



Color standards

Description	Pk	Cat. No.
Platinum-cobalt colour standard (Hazen)	100 ml	84814.180
Platinum-cobalt colour standard (Hazen)	500 ml	84814.270
Colour reference solutions B (B1-B9)	KIT	85752.001
Colour reference solutions BY (BY1-BY7)	KIT	85753.001
Colour reference solutions Y (Y1-Y7)	KIT	85754.001
Colour reference solutions GY (GY1-GY7)	KIT	85755.001
Colour reference solutions R (R1-R7)	KIT	85756.001

Brix standards

Description	Pk	Cat. No.
Sucrose (Brix) standard stabilised 0°	15 ml	87000.015
Sucrose (Brix) standard stabilised 5°	15 ml	87001.015
Sucrose (Brix) standard stabilised 7°	15 ml	87002.015
Sucrose (Brix) standard stabilised 10°	15 ml	87003.015
Sucrose (Brix) standard stabilised 11,2°	15 ml	87004.015
Sucrose (Brix) standard stabilised 11,5°	15 ml	87005.015
Sucrose (Brix) standard stabilised 12°	15 ml	87006.015
Sucrose (Brix) standard stabilised 12,5°	15 ml	87007.015
Sucrose (Brix) standard stabilised 14,9°	15 ml	87008.015
Sucrose (Brix) standard stabilised 15°	15 ml	87009.015
Sucrose (Brix) standard stabilised 20°	15 ml	87011.015
Sucrose (Brix) standard stabilised 25°	15 ml	87012.015
Sucrose (Brix) standard stabilised 30°	15 ml	87013.015
Sucrose (Brix) standard stabilised 35°	15 ml	87014.015
Sucrose (Brix) standard stabilised 40°	15 ml	87015.015
Sucrose (Brix) standard stabilised 45°	15 ml	87016.015
Sucrose (Brix) standard stabilised 50°	15 ml	87018.015
Sucrose (Brix) standard stabilised 55°	15 ml	87019.015
Sucrose (Brix) standard stabilised 60°	15 ml	87021.015
Sucrose (Brix) standard stabilised 67,5°	15 ml	87022.015

Refractive index standards

Description	Pk	Cat. No.
Refractive index standard kit 1 (2x 5x 10 ml); (Isooctane / Water)	Kit	85757.001
Refractive index standard kit 2 (2x 5x 10 ml); (Toluene / Water)	Kit	85758.001



KARL FISCHER REAGENTS

An extension to the range with new products and pack sizes for analytical chemists measuring water content who need, accurate results every time.

MORE INFO ON REAGENTS AT VWR.COM

Karl Fischer reagents

Description	Pk	Cat. No.
Karl Fischer working medium K	1 l	**85499.290**
Karl Fischer buffer for acids	500 ml	**85497.260**
Karl Fischer buffer for acids	1 l	**85498.290**
Karl Fischer volumetric reagent, CombiNORM 2	2,5 l	**85451.320**
Karl Fischer volumetric reagent, CombiNORM 5	2,5 l	**85452.320**
Karl Fischer solvent (Working Medium)	2,5 l	**85453.320**
Karl Fischer Combi solvent E	2,5 l	**85454.320**
Karl Fischer methanol quick reagent	2,5 l	**85457.320**
Karl Fischer volumetric reagent CombiNORM 5K	2,5 l	**85463.320**
Karl Fischer solvent K reagent	2,5 l	**85464.320**
Karl Fischer volumetric reagent TitrANT 5	2,5 l	**85468.320**

AVS TITRINORM VOLUMETRIC SOLUTIONS FOR TITRATION

Titration is a really common analytical method. Our range of accurate 'ready to use' solutions has been expanded, see the table below.



VISIT VWR.COM FOR MORE INFO

Volumetric solutions for titration

Description	Pk	Cat. No.
Acetic acid solution 2% VOLUSOL®	1 l	86139.310
Acetic acid solution 0,1 mol/l (0,1 N) AVS TITRINORM	1 l	300652.1000
Acetic acid solution 0,5 mol/l (0,5 N) AVS TITRINORM	1 l	85803.290
Benzethonium chloride solution 0,01 N AVS TITRINORM	2,5 l	89576.320
Benzethonium chloride solution 0,03 N AVS TITRINORM	2,5 l	89577.320
CDTA di-sodium salt solution 0,1 mol/l AVS TITRINORM	1 l	86187.290
Copper di-ammonium EDTA solution 0,1 mol/l AVS TITRINORM	500 ml	86186.260
Copper sulphate solution 0,1 mol/l AVS TITRINORM	1 l	86183.290
EDTA disodium salt solution 0,0178 mol/l (N/28) AVS TITRINORM	1 l	30029.290
EDTA disodium salt solution 0,0178 mol/l (N/28) AVS TITRINORM	5 l	30029.360
EDTA disodium salt solution 0,0178 mol/l (N/28) AVS TITRINORM	10 l	30029.400
EDTA disodium salt 0,1 mol/l 0,2 N AVS TITRINORM	1 L	28662.290
EDTA disodium salt 0,1 mol/l 0,2 N AVS TITRINORM	5 L	28662.370
Sodium hydroxide 10 mol/l 10 N AVS TITRINORM	1 L	5041.1000
Hanus solution 0,1 mol/l AVS TITRINORM	1 l	86182.290
Hydrochloric acid 0,1 mol/l (0,1 N) in 2-propanol, DIN 51558 AVS TITRINORM	1 l	86170.290
Hydrochloric acid solution 1,128% (w/v)	1 l	86132.290
Hydrochloric acid solution 1,128% (w/v)	5 l	86132.360
Hydrochloric acid solution 3 mol/l (3 N) VOLUSOL®	1 l	5050.1000
Iodide iodate solution 1/128 mol/l ConvoL NORMADOSE™	Ampoule	84103.600
Iodine solution 0,025 mol/l (0,05 N) AVS TITRINORM	500 ml	85805.260
Nitric acid 10 mol/l (10 N) AVS TITRINORM	1 l	86172.290
Nitric acid solution 2 mol/l (2 N) AVS TITRINORM	1 l	310568.1000
Nitric acid solution 6 mol/l (6 N) AVS TITRINORM	1 l	310547.1000
Perchloric acid solution 0,1 mol/l (0,1 N) AVS TITRINORM Reag. Ph. Eur.	500 ml	30110.264
Perchloric acid solution 0,1 mol/l (0,1 N) AVS TITRINORM Reag. Ph. Eur.	1 l	30110.297
Perchloric acid solution 0,1 mol/l (0,1 N) AVS TITRINORM Reag. Ph. Eur.	2,5 l	30110.320
Potassium bromate solution 1/60 mol/l (0,1 N) ConvoL NORMADOSE™	Ampoule	32060.606
Potassium bromide solution 0,1 mol/l AVS TITRINORM	1 l	85808.290
Potassium chloride solution 0,1 mol/l AVS TITRINORM	1 l	85809.290
Potassium dichromate solution 0,02 mol/l AVS TITRINORM	1 l	86181.290
Potassium dihydrogen phosphate solution 1/15 mol/l AVS TITRINORM	1 l	86185.290
Potassium hydroxide 30%	2,5 l	310550.2500
Potassium hydroxide solution 0,1 mol/l (0,1 N) in 2-propanol, DIN 51558 AVS TITRINORM	1 l	86190.290
Potassium permanganate solution 0,01 mol/l (0,05 N) AVS TITRINORM	1 l	85810.290
Potassium permanganate solution 0,002 mol/l, (0,01 N) AVS TITRINORM	1 l	85021.290
Potassium permanganate solution 0,02 mol/l (0,1 N) ConvoL NORMADOSE™	Ampoule	84595.600
Silver nitrate solution 0,025 mol/l (0,025 N) in 2-propanol AVS TITRINORM	2,5 l	88017.320
Silver nitrate solution 0,1 mol/l (0,1 N) AVS TITRINORM Reag. Ph. Eur., USP	1 l	30472.290
Silver nitrate solution 0,1 mol/l (0,1 N) AVS TITRINORM Reag. Ph. Eur., USP	2,5 l	30472.323
Silver sulphate solution 80 g/l in sulphuric acid 96% AVS TITRINORM	1 l	86189.290
Sodium chloride solution 0,1 mol/l (0,1 N) AVS TITRINORM	1 l	85811.290
Sodium chloride solution 0,5 mol/l (0,5 N) AVS TITRINORM	1 l	85812.290
di-Sodium hydrogen phosphate solution 1/15 mol/l AVS TITRINORM	1 l	86184.290
Sodium hydroxide solution 0,02 mol/l (0,02 N) AVS TITRINORM	500 ml	86188.260
Sodium hydroxide solution 2 mol/l (2 N) AVS TITRINORM	10 l	98108.400
Sodium lauryl sulphate solution 0,01 mol/l AVS TITRINORM	1 l	309747.1000
Sulphuric acid 0,005 mol/l (0,01 N) ConvoL NORMADOSE	Ampoule	84102.600
Sulphuric acid solution 0,02 mol/l, (0,04 N) AVS TITRINORM	10 l	30146.400
Zinc acetate solution 1 mol/l in acetic acid 0,5 mol/l (Solution Carrez II)	1 l	5056.1000

INDICATORS

New pH and metal indicators are available completing our extensive range.



Indicators

Description	Pk	Cat. No.
Alizarin red S mono sodium salt (C.I. 58005), indicator AnalaR® NORMAPUR® Reag. Ph. Eur.	25 g	86156.150
Alizarin red S mono sodium salt (C.I. 58005), indicator AnalaR® NORMAPUR® Reag. Ph. Eur.	100 g	86156.180
Diphenylamine-4-sulphonic acid sodium salt, ACS	10 g	86161.100
Eriochromocyanine AnalaR® NORMAPUR®	25 g	86168.130
Ferroin solution 1/40 mol/l	100 ml	86180.180
Ferroin solution 1/40 mol/l	500 ml	86180.260
Methyl orange indicator (C.I. 13025) ACS, Reag. Ph. Eur.	25 g	86151.150
Methyl orange indicator (C.I. 13025) ACS, Reag. Ph. Eur.	100 g	86151.180
Methyl red (C.I. 13020), indicator AnalaR® NORMAPUR® ACS, Reag. Ph. Eur.	25 g	86159.150
Methyl red (C.I. 13020), indicator AnalaR® NORMAPUR® ACS, Reag. Ph. Eur.	100 g	86159.180
Phenol red indicator AnalaR® NORMAPUR® ACS, Reag. Ph. Eur.	5 g	86160.050
Phenol red indicator AnalaR® NORMAPUR® ACS, Reag. Ph. Eur.	25 g	86160.150
Phenol red indicator AnalaR® NORMAPUR® ACS, Reag. Ph. Eur.	100 g	86160.180
Phenolphthalein indicator AnalaR® NORMAPUR® ACS, Reag. Ph. Eur.	25 g	86158.150
Phenolphthalein indicator AnalaR® NORMAPUR® ACS, Reag. Ph. Eur.	100 g	86158.180
Phenolphthalein indicator AnalaR® NORMAPUR® ACS, Reag. Ph. Eur.	500 g	86158.260
Phthaleine purple AnalaR® NORMAPUR® ACS, Reag. Ph. Eur.	1 g	86166.010
Phthaleine purple AnalaR® NORMAPUR® Reag. Ph. Eur.	5 g	86166.050
Thymol blue indicator AnalaR® NORMAPUR® ACS, Reag. Ph. Eur.	5 g	86155.050
Thymol blue indicator AnalaR® NORMAPUR® ACS, Reag. Ph. Eur.	25 g	86155.150
Thymolphthalein indicator AnalaR® NORMAPUR® ACS, Reag. Ph. Eur.	5 g	86157.050
Thymolphthalein indicator AnalaR® NORMAPUR® ACS, Reag. Ph. Eur.	25 g	86157.150
Thymolphthalein indicator AnalaR® NORMAPUR® ACS, Reag. Ph. Eur.	100 g	86157.180
Xylenol orange, tetrasodium salt ACS, Reag. Ph.Eur.	1 g	86150.010
Xylenol orange, tetrasodium salt ACS, Reag. Ph.Eur.	5 g	86150.050

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MORE INFO DETERGENTS: VWR.COM

Detergents

Description	Pk	Cat. No.
LABWASH® Premium Alkamatic	5 l	84549.365
LABWASH® Premium Alkamatic PF	5 l	84550.365
LABWASH® Premium Acidrinse C	5 l	84551.365
LABWASH® Premium Acidrinse P	5 l	84552.365
LABWASH® Premium Easyrinse	5 l	84553.365
LABWASH® Premium Pure	5 l	84555.365
LABWASH® Premium Alkamatic LA	5 l	84556.365

Detergents

Description	Pk	Cat. No.
LABWASH® Premium MA Ultra - Strong alkaline universal cleaner for manual cleaning	5 l	85831.320
LABWASH® Premium MA Ultra - Strong alkaline universal cleaner for manual cleaning	5 l	85831.360
AQUA-RESIST WB	5 l	86174.360
AQUA-RESIST WB	20 l	86174.440

GENERAL LAB REAGENTS

Every day, a scientist needs some reagents to filter, clarify or secure a reaction. Here are some interesting products that have been designed to support you.



General lab reagents

Description	Pk	Cat. No.
Charcol activated gas adsorption	1 kg	84147.293
Charcol activated gas adsorption	5 kg	84147.362
Sea sand purified by acid and calcined AnalaR® NORMAPUR®	1 kg	86152.290
Sea sand purified by acid and calcined AnalaR® NORMAPUR®	5 kg	86152.360
Sea sand purified by acid and calcined AnalaR® NORMAPUR®	25 kg	86152.460
Sea sand GPR RECTAPUR®	1 kg	86154.295
Sea sand GPR RECTAPUR®	5 kg	86154.364
Sea sand GPR RECTAPUR®	25 kg	86154.460
Starch, soluble AnalaR® NORMAPUR®	1 kg	21153.290

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