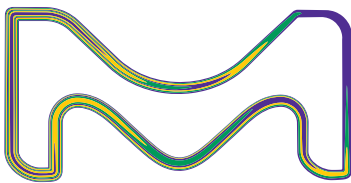


Ultrapur and Suprapur® High Purity

Acids and Bases



High purity acids and bases

Suprapur® acids and bases | Ultrapur acids

Digestion with acids is often used during sample preparation. The reagents for sample preparation have an important impact on the outcome of the measurement. In modern instrumental trace analysis, any impurity can disturb the measurement so acids with low impurities should be used to minimize the interference on the instrument signal. High purity Suprapur® acids and bases and Ultrapur acids offer the most suitable purity of wet digestion materials with low impurities during the entire minimum shelf life.

Advantages

- Choose your purity grade for instrumental trace analysis
- Suprapur® acids filled in borosilicate glass or extra pure HDPE material
- Ultrapur acids filled in PFA bottles
- Certificate of Analysis gives an extensive impurity profile

quality grades for your individual needs

Visit

[vwr.com/MilliporeSigma](https://www.vwr.com/MilliporeSigma)



Different grades to meet your needs

Whenever you are using an acid, you have to consider your application, your target and of course your budget. For wet digestion, take a look at our high purity Suprapur® acids and bases and Ultrapur acids designed especially for instrumental trace analysis. Each application is different and therefore we offer a wide range of acids in different grades and many different packaging sizes and materials so you can choose the one you need.

Suprapur® acids and bases

- High purity acids, bases & water
- Use for highly sophisticated instrumental trace analysis, e.g. AAS and ICP-OES
- Specified parameters in ppb range

Ultrapur acids

- High purity acids, hydrogen peroxide & water
- Use for highly sophisticated instrumental ultra-trace analysis, e.g. ICP-MS
- Specified parameters in ppt range

Reagents for wet digestion

The more sensitive the instrumental detection becomes, the more important it is to use highly pure reagents. We provide a whole range of high purity reagents that meet the demands of modern instrumental analysis. During the sample preparation, it is important to know the blank values of the reagents. On the certificate you find the specification and actual batch values of the parameters you need.

Suprapur® acids and bases are suitable for trace analysis in the ng/g (ppb) range.

Suprapur® acids are filled in borosilicate or extra pure PE bottles. The material minimizes any elemental impurity of the acid, so the specification of the unopened bottle is kept during the minimum shelf life. The bottles are cleaned and pre-conditioned before filling and quality control is done after filling. This gives you the assurance that the certified batch values are those values of the filled acid. Suprapur® reagents are packed in a stable outer-box.

Suprapur® hydrogen peroxide is packed in a black bottle to protect it against light. The bottle is made of extra pure PE material to avoid any contamination. To make it more safe for you, hydrogen peroxide bottles are closed with the SafetyCap.

The SafetyCap with the PTFE membrane releases the pressure, but avoids any contamination.

Ultrapur acids are preferred for ultra-trace analysis in the pg/g (ppt) range.

Ultrapur acids are produced by sub-boiling distillation. The slowly distilled reagents subsequently have the lowest possible trace-impurities. Ultrapur acids are exclusively filled in pre-conditioned PFA (fluoropolymer) bottles. This material meets the highest demands of all users for ultra-trace instrumental analysis, e.g. ICP-MS. Products are packed in a stable outer-box.



High purity acids and bases

Suprapur® acids and bases

Designation	Content	Packaging	Cat. No.
Acetic acid 100% Suprapur®	250 mL	Glass bottle	EM1.00066.0250
	1 L	Glass bottle	EM1.00066.1000
Ammonia solution 25% Suprapur®	250 mL	PE bottle	EM1.05428.0250
	500 mL	PE bottle	EM1.05428.0500
	1 L	PE bottle	EM1.05428.1000
	2.5 L	PE bottle	EM1.05428.2500
Boric acid Suprapur®	50 g	PE bottle	EM1.00765.0050
	500 g	PE bottle	EM1.00765.0500
Formic acid 98–100% Suprapur®	250 mL	Glass bottle	EM1.11670.0250
	1 L	Glass bottle	EM1.11670.1000
Hydrobromic acid 47% Suprapur®	250 mL	Glass bottle	EM1.00306.0250
	1 L	Glass bottle	EM1.00306.1000
Hydrochloric acid 30% Suprapur®	250 mL	PE bottle	EM1.00318.0250
	500 mL	PE bottle	EM1.00318.0500
	1 L	PE bottle	EM1.00318.1000
Hydrofluoric acid 40% Suprapur®	250 mL	HDPE dosage bottle ¹	EM1.00335.0250
	500 mL	HDPE dosage bottle ¹	EM1.00335.0500
	1 L	PE bottle	EM1.00335.1000
	2.5 L	PE bottle	EM1.00335.2500
Hydrogen peroxide 30% Suprapur®	250 mL	PE bottle with SafetyCap ²	EM1.07298.0250
	1 L	PE bottle with SafetyCap ²	EM1.07298.1000
Nitric acid 65% Suprapur®	250 mL	Glass bottle	EM1.00441.0250
	1 L	Glass bottle	EM1.00441.1000

¹: See product details on page 6

²: See product details on page 7

Designation	Content	Packaging	Cat. No.
Oxalic acid dihydrate Suprapur®	100 g	PE bottle	EM1.00489.0100
Perchloric acid 70% Suprapur®	250 mL	Glass bottle	EM1.00517.0250
	1 L	Glass bottle	EM1.00517.1000
Ortho-Phosphoric acid 85% Suprapur®	250 mL	PE bottle	EM1.00552.0250
	500 mL	PE bottle	EM1.00552.0500
Sodium hydroxide solution 30% Suprapur®	1 L	PE bottle	EM1.00552.1000
	2.5 L	PE bottle	EM1.00552.2500
Sulphuric acid 96% Suprapur®	250 mL	PE bottle	EM1.05589.0250
	1 L	PE bottle	EM1.05589.1000
Sulphuric acid 96% Suprapur®	250 mL	Glass bottle	EM1.05589.2500
	1 L	Glass bottle	EM1.05589.1000
Water Suprapur®	250 mL	Glass bottle	EM1.00714.0250
	1 L	Glass bottle	EM1.00714.1000
Water Suprapur®	5 L	PE bottle	EM1.00473.5000

Ultrapur acids

Designation	Content	Packaging	Cat. No.
Hydrochloric acid 30% Ultrapur	250 mL	PFA bottle	EM1.01514.0250
	500 mL	PFA bottle	EM1.01514.0500
	1 L	PFA bottle	EM1.01514.1000
Hydrogen peroxide 31% Ultrapur	1 L	PFA bottle	EM1.06097.1000
Nitric acid 60% Ultrapur	250 mL	PFA bottle	EM1.01518.0250
	500 mL	PFA bottle	EM1.01518.0500
	1 L	PFA bottle	EM1.01518.1000
Sulphuric acid 96% Ultrapur	250 mL	PFA bottle	EM1.01516.0250
	500 mL	PE bottle	EM1.01262.0500
Water Ultrapur	500 mL	PE bottle	EM1.01262.0500
	1 L	PE bottle	EM1.01262.1000

To order

vwr.com/MilliporeSigma

SafetyCap

Leakproof against liquids—allows excess pressure to be released

Hydrogen peroxide is capable of generating excess pressure through chemical reactions and is therefore supplied in bottles with a special screw cap. This cap has a valve that allows the gas formed to be released, hence preventing the build-up of pressure. For safety purposes, these bottles are additionally packaged in a PE bag.

SafetyCap—the intelligent closure

In order to completely avoid contamination, we supply all such reagents fitted with the SafetyCap. This innovative cap allows absolutely no reagent to leak—even if the bottle is tipped. The PTFE membrane sintered onto the inside of the cap allows gas to be released but is absolutely leakproof against liquids. This has been proven in numerous warehouse and stress tests at our package testing facility at all temperatures and in all positions.



SafetyCap

- Allows gas to be released and the internal pressure to be decreased
- Allows no liquid to escape, thus protecting the environment from contamination

Cat. No.:

EM1.07298.0250 and **EM1.07298.1000**

High purity acids and bases

Supelco® analytical products

Accurate.

Precise.

Consistent.

Our comprehensive portfolio, developed by analytical chemists for analytical chemists, covers a broad range of analytical solutions, and every product is meticulously quality-controlled to maintain the integrity of your testing protocols.



Supelco®

Analytical Products

MilliporeSigma
400 Summit Drive
Burlington, MA 01803

vwr.com/MilliporeSigma

 **avantor**™
delivered by **VWR**™

VWR.COM

Prices, product, and/or services details are current when published and subject to change without notice. | Certain products or services may be limited by federal, state, provincial, or local regulations. | VWR, part of Avantor, makes no claims or warranties concerning sustainable/green products. Any claims concerning sustainable/green products are the sole claims of the manufacturer and not those of VWR International, LLC and/or Avantor, Inc. or affiliates. All prices are in US dollars unless otherwise noted. Offers valid in US and Canada unless otherwise noted, void where prohibited by law or company policy, while supplies last. | Trademarks are owned by Avantor, Inc. or its affiliates, unless otherwise noted. | Visit vwr.com to view our privacy policy, trademark owners, and additional disclaimers. © 2021 Avantor, Inc. All rights reserved.

0821 Lit. No. 130224W

© 2020 Merck KGaA, Darmstadt, Germany and/or its affiliates. All Rights Reserved. MilliporeSigma, the vibrant M, Suprapur, and Supelco 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. MS_BR5665EN Ver. 1.0
30794
07/2020