

**Lewatit® Ultrapure 1294 MD** is a “ready to use” mixed bed for final polishing in semiconductor applications.

The high grade gel type components are intensively purified to achieve highest purity water conditions.

By special internal conversion technique of the SBA component, **Lewatit® Ultrapure 1294 MD** has very high capacity for boron and silica.

Due to the delicate mixing to an equivalent mix bed ratio the particle release is extremely low.

The performance of each produced batch number of **Lewatit® Ultrapure 1294 MD** is checked.

The gel type components have a narrow diameter distribution, thus the ready to use mixed bed can be easily separated for regeneration in mixed bed systems.

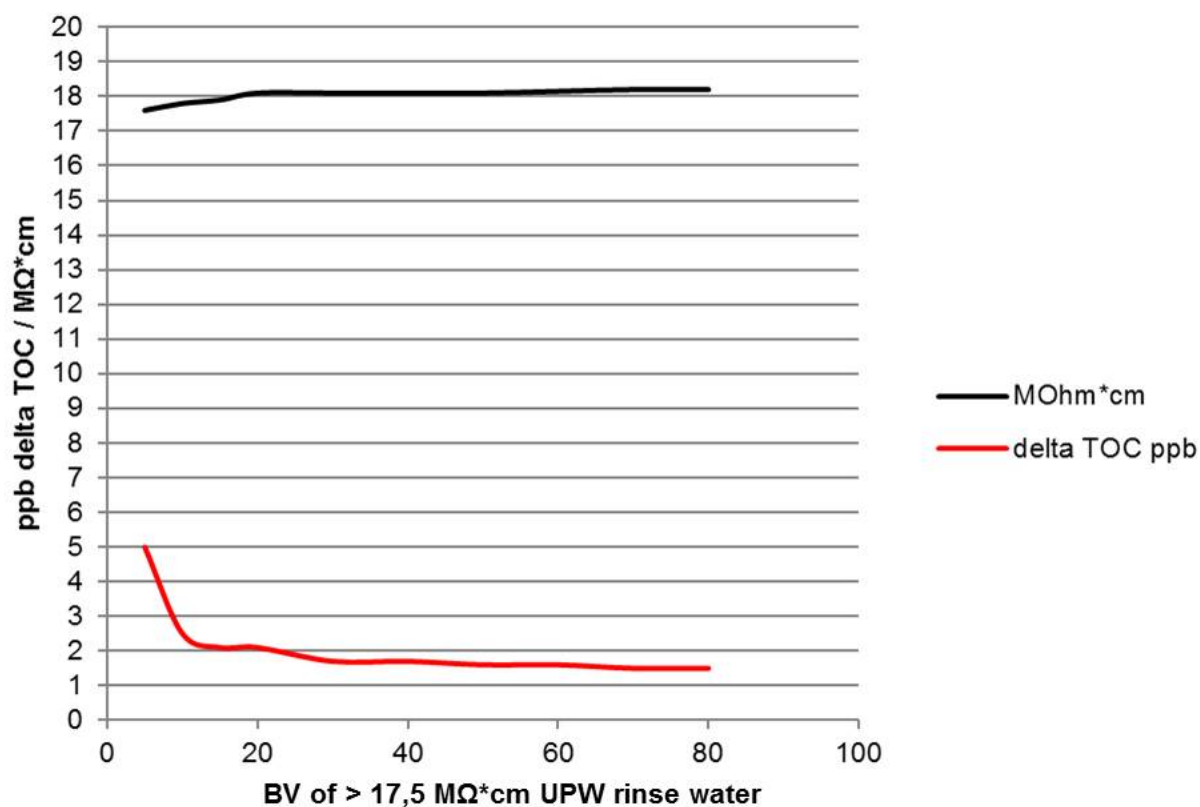
By reason of the monodisperse production the resin mixture has a very high physical and chemical stability.

High metric flow rates with low pressure loss are possible.

You will receive **Lewatit® Ultrapure 1294 MD** in special packaging which avoids any external contamination.

The special properties of this product can only be fully utilized if the technology and process used correspond to the current state-of-the-art. Further advice in this matter can be obtained from Lanxess, Business Unit Liquid Purification Technologies.

Typical rinse performance  
Lewatit® UP 1294 MD



This document contains important information  
and must be read in its entirety.

### Common Description

Delivery form	H <sup>+</sup> /OH <sup>-</sup>
Functional group	quaternary ammonium, type 1 /sulfonic acid
Matrix	styrenic
Structure	gel
Appearance	dark brown / light brown translucent

### Specified Data

Uniformity coefficient (SAC component)		max.	1.1
Uniformity coefficient (SBA component)		max.	1.1
Mean bead size (SAC component)	d50	mm	0.60 (+-0.05)
Mean bead size (SBA component)	d50	mm	0.67 (+-0.06)
Total capacity (SAC component H <sup>+</sup> form)		min. eq/L	2.1
Total capacity (SBA component OH <sup>-</sup> form)		min. eq/L	1.1

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### Typical Physical and Chemical Properties

Ultrapure water rinse test (resistivity)	after 80 BV	min. MOhm*cm	18
Ultrapure water rinse test	delta TOC after 80 BV	max. ppb	1.5
Bulk density for shipment	(+/- 5%)	g/L	710
Density		approx. g/mL	1.14
Water retention (delivery form)		approx. weight %	45 - 50 (SAC), 59 - 65 (SBA)
Volume change (during exhaustion)		max. approx. %	-15
Stability pH range			0 - 14
Storability (from the time of delivery)		max. years	1
Storability temperature range		°C	-20 - +40
Friability		average g/bed	600

### Operation

Operating temperature		max. °C	40
Operating pH range	during exhaustion		0 - 14
Bed depth for single column		min. mm	600
Specific pressure loss kPa*h/m <sup>2</sup> (15°C)		kPa*h/m <sup>2</sup> (15°C)	1
Max. pressure loss during operation		kPa	200
Specific flow rate		max. BV/h	50

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## Additional Information & Regulations

### Safety precautions

Strong oxidants, e.g. nitric acid, can cause violent reactions if they come into contact with ion exchange resins.

### Toxicity

The safety data sheet must be observed. It contains additional data on product description, transport, storage, handling, safety and ecology.

### Disposal

In the European Community ion exchange resins have to be disposed, according to the European waste nomenclature which can be accessed on the internet-site of the European Union.

### Storage

It is recommended to store ion exchange resins at temperatures above the freezing point of water under roof in dry conditions without exposure to direct sunlight. If resin should become frozen, it should not be mechanically handled and left to thaw out gradually at ambient temperature. It must be completely thawed before handling or use. No attempt should be made to accelerate the thawing process.

### Packaging

The experience has shown that the packaging stability for reliable resin containment is limited to 24 months under the storage conditions described above. It is therefore recommended to use the product within this time frame; otherwise the packaging condition should be checked regularly.

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PRODUCT INFORMATION  
LEWATIT® UltraPure 1294 MD



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