

Lewatit

PRODUCT INFORMATION LEWATIT[®] UltraPure 1294 MD

Lewatit [®] **Ultrapure 1294 MD** is a "ready to use" mixed bed for final polishing in Ultrapure water applications.

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

Due a special conversion process of the SBA component, **Lewatit** [®] **Ultrapure 1294 MD** has very high capacity for boron and silica.

Avoiding excessive mechanical stress during mixing to an equivalent ratio leads to an extremely low particle release.

The performance of each produced batch number of Lewatit [®] Ultrapure 1294 MD is controlled.

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.

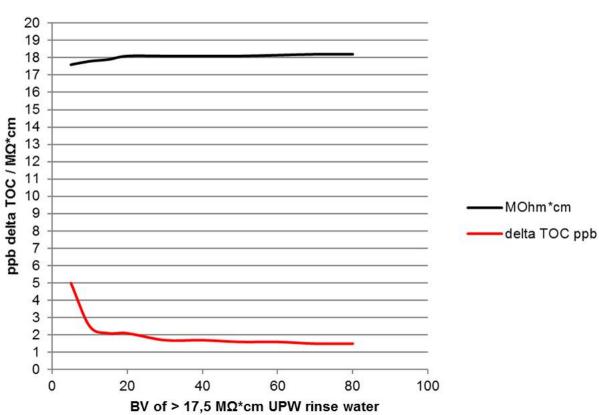
High metric flow rates with low pressure loss are possible.

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





Common Description

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

Specified Data

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





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
Water retention (SAC component H ⁺ form)		approx. weight %	45 -50
Water retention (SBA component OH form)		approx. weight %	59 -65
Volume change (during exhaustion)		max. approx. %	-15
Stability pH range			0 - 14
Storage time (after delivery)		max. years	1
Storage temperature range		C°	-20 - +40

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 ² (15°C)		kPa*h/m² (15°C)	1
Max. pressure loss during operation		kPa	200
Specific flow rate		max. BV/h	100





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.



This information and our technical advice – whether verbal, in writing or by way of trials – are given in good faith but without warranty, and this also applies where proprietary rights of third parties are involved. Our advice does not release you from the obligation to check its validity and to test our products as to their suitability for the intended processes and uses. The application, use and processing of our products and the products manufactured by you on the basis of our technical advice are beyond our control and, therefore, entirely your own responsibility. Our products are sold in accordance with the current version of our General Conditions of Sale and Delivery.

