

Lewatit® UltraPure 1296 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 1296 MD** has a 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 1296 MD** is checked.

The gel type components have a wider diameter distribution, thus the ready to use mixed bed is less separable.

To allow a separation of these mixed beds a higher freeboard is necessary compared to **Lewatit® UP 1294 MD**.

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

The smaller diameter of the SAC resin produced especially for semiconductor applications allows an extremely high kinetic exchange rate.

You will receive **Lewatit® UltraPure 1296 MD** in special packaging which avoids any external contamination.

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 (SAC component)		max.	1.1
Uniformity coefficient (SBA component)		max.	1.1
Mean bead size (SAC component)	d50	mm	0.55 (+-0.05)
Mean bead size (SBA component)	d50	mm	0.67 (+-0.06)
Total capacity (SAC component H ⁺ form)		min. eq/L	2.1
Total capacity (SBA component OH ⁻ form)		min. eq/L	1.1

Typical Physical and Chemical Properties

		US Units		Metric Units	
Ultrapure water rinse test (resistivity)	after 80 BV rinsing			min. MOhm*cm	18
Ultrapure water rinse test	delta TOC after 80 BV			max. ppb	1.0
Bulk density for shipment	(+/- 5%)	lb/ft ³	44.0	g/L	710
Water retention (delivery form)				approx. weight %	46 - 52 (SAC), 56 - 66 (SBA)
Stability pH range					0 - 14
Storage time (after delivery)				max. years	1
Storability temperature range				°C	-20 - +40

Operation

		US Units		Metric Units	
Operating temperature		max. °F	104	max. °C	40
Operating pH range	during exhaustion				0 - 14
Bed depth for single column		min. inches	24	min. mm	600
Specific pressure loss (15°C)				kPa*h/m ²	1.2
Max. pressure loss during operation		PSI	29	kPa	200
Specific flow rate		max. gpm/ft ³	13	max. BV/h	100

Additional Information & Regulations

PRODUCT SAFETY INFORMATION REQUIRED FOR SAFE USE OF PRODUCTS MENTIONED HEREIN IS NOT INCLUDED IN THIS DOCUMENT. BEFORE HANDLING ANY PRODUCT, ALWAYS READ PRODUCT AND SAFETY DATA SHEETS AND CONTAINER LABELS FOR SAFE USE, PHYSICAL AND HEALTH HAZARD INFORMATION.

Safety precautions

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

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.

Packaging

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

PRODUCT INFORMATION

LEWATIT® UltraPure 1296 MD



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