

For the demineralization of water in the production of ultra pure water

Lewatit® UltraPure 1261 MD is a macroporous, strongly basic anion exchange resin (SBA, type I) with a monodispersed bead size distribution (uniform particles) based on a styrene-divinylbenzene copolymer for the use in WS/VWS systems for the production of ultra pure water.

The monodisperse beads (uniformity coefficient: max. 1.1) are chemically and osmotically highly stable. The optimized kinetics lead to an increased operating capacity, and the very low content of fines also results in a low pressure drop compared to ion exchange resins with heterodisperse bead size distribution.

For the production of ultra pure water, leaching of organics from **Lewatit® UltraPure 1261 MD** into the treated water is reduced to a level less than **50 ppb**. Hence, **Lewatit® UltraPure 1261 MD** is specially recommended for the demineralization of water to generate ultra pure quality.

Die besonderen Eigenschaften dieses Produktes lassen sich nur dann optimal nutzen, wenn Verfahren und Filterkonstruktion dem Stand der Technik entsprechen und die Betriebsbedingungen auf die individuellen Bedürfnisse abgestimmt sind. Zur weiteren Beratung steht Ihnen in der BU Liquid Purification Technologies (LPT) ein Team von Spezialisten zur Verfügung.

Common Description

Delivery form	Cl ⁻
Functional group	Quaternary amine, type I
Matrix	Crosslinked polystyrene
Structure	Macroporous
Appearance	Beige, opaque

Specified Data

		metric units	
Uniformity coefficient		max.	1.1
Mean bead size		microns	0.65 (+/- 0.05)
Specific resistivity	ca. 80 BV, as a single component	min. MOhm*cm	4.0
Ultra pure water test	delta TOC	max. ppb	50
Total capacity		min. eq/l	1.1

Typical Physical and Chemical Properties

		Metrische Einheiten	
Bulk density	(+/- 5 %)	g/L	640
Density		approx. g/ml	1.06
Water retention		wt. %	60 - 65
Bed expansion	at 20°C, per m/h	vol. %	0 - 14
Storability	of the product	max. years	12
Storability	of the product, at < 25°C	max. months	-20 - +40

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

Recommended Start-up Conditions*

		metric units	
OPERATION			
Operating temperature		max. °C	40
Operating pH-range			0 - 12
Bed depth		min. mm	800
Specific pressure drop	(15 °C)	approx. kPa*h/m ²	0.8
Pressure drop		max. kPa	300
Linear velocity	Operation	max. m/h	60
REGENERATION, COUNTER-CURRENT			
Regenerant	Type		NaOH
Regenerant	Quantity	approx. g/L	50
Regenerant	Concentration	approx. wt. %	2 - 4
Linear velocity	Regeneration	approx. m/h	5
Rinse water requirement	slow / fast	approx. BV	2.5
REGENERATION, CO-CURRENT			
Regenerant	Type		NaOH
Regenerant	Quantity	approx. g/L	100
Regenerant	Concentration	approx. wt. %	3 - 5
Linear velocity		approx. m/h	5
Linear velocity	Backwash (20 °C)	approx. m/h	5
Linear velocity	Rinsing	approx. m/h	5
Rinse water requirement	slow / fast	approx. BV	2.5 / 8
Bed expansion	(20 °C, per m/h)	approx. vol. %	18
Freeboard	Backwash (extern / intern)	vol. %	100

* The recommended operating conditions refer to the use of the product under normal operating conditions. It is based on tests in pilot plants and data obtained from industrial applications. However, additional data are needed to calculate the resin volumes required for ion exchange units. These data are to be found in our Technical Information Sheets.

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.

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.

LENNTECH

WATER TREATMENT SOLUTIONS

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