

Lewatit® MP 62 is a weakly basic, macroporous anion exchange resin with tertiary amine groups (monofunctional), hence of particularly low basicity, and of standard bead size distribution. Its high total and operating capacity as well as the outstanding mechanical stability makes it unique for demineralization units, especially in combination with a strongly dissociated anion exchange resin if low silica leakage is required. Due to its macroporous structure Lewatit® MP 62 stands for effective adsorption and desorption of naturally occuring organic substances (high resistance to organic fouling).

Lewatit® MP 62 is especially suitable for:

- » the demineralization of water for industrial steam generation operated with co-current or modern countercurrent systems like e.g. Lewatit® WS System, Lewatit® Liftbed System or Lewatit® Rinsebed System
- » the removal of organic matter, especially from surface water
- » the deacidification of organic process sreams

Note:

In order to avoid loss of active resin mass during backwash steps (due to the low density of 1.02 g/ml) we recommend to start first backwash step after at least 2-3 service runs which makes the loss of active resin mass less risky. Please make sure, that the linear velocity for the backwash step is at max. 3 m/h (100 % freeboard!).

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 (LPT).

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





General Description

Ionic form as shipped	Free base
Functional group	Tertiary amine
Matrix	Crosslinked polystyrene
Structure	Macroporous
Appearance	Beige, opaque

Specified Data

		metric units	
Uniformity Coefficient		max.	1.8
Bead size	> 90 %	mm	0.315 - 1.25
Effective size		mm	0.47 (+/- 0.06)
Total capacity	•	min. eq/l	1.7

Physical and Chemical Properties

,	<u>.</u>		
		metric units	
Bulk density	(+/- 5 %)	g/l	620
Density	•	approx. g/ml	1.02
Water retention		wt. %	50 - 55
Volume change	free base> Cl	max. vol. %	45
Stability	at pH-range		0 - 14
Stability	temperature range	°C	-20 - +130
Storability	of the product	max. years	2
Storability	temperature range	°C	-20 - +40

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Recommended Operating Conditions*

		metric units	
OPERATION			
Operating temperature		max. °C	130
Operating pH-range			0 - 8
Bed depth		min. mm	800
Specific pressure drop	(15 °C)	approx. kPa*h/m²	1.5
Pressure drop	•	max. kPa	250
Linear velocity	operation	max. m/h	40
REGENERATION, COUNTER-CURRENT			
Regenerant	type		NaOH
Regenerant	quantity	approx. g/l	80
Regenerant	concentration	wt. %	3 - 5
Linear velocity		approx. m/h	5
Linear velocity	rinsing	approx. m/h	5
Rinse water requirement	slow / fast	approx. BV	8
OTHER PARAMETERS			
Linear velocity	backwash (20 °C)	approx. m/h	3
Bed expansion	(20 °C, per m/h)	approx. vol. %	30
Freeboard	backwash	vol. %	100 - 120
	(extern / intern)		
CONDITIONING			
Conditioning agent	quantity	g/l	33
Conditioning agent	concentration	approx. wt. %	3.7
Linear velocity	rinsing	approx. m/h	5
Linear velocity	conditioning	approx. m/h	5

^{*} 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.

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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.

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.

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