

# PRODUCT INFORMATION

## LEWATIT® MP 62 WS



**Lewatit® MP 62 WS** is a weakly basic, macroporous anion exchange resin with tertiary amine groups (monofunctional), hence of particularly low basicity. Its special bead size distribution makes it suitable for use in the:

- » Lewatit® WS System
- » Lewatit® VWS System

Due to its high total and operating capacities and outstanding mechanical stability, **Lewatit® MP 62 WS** is specially suitable for the:

- » groundwater decontamination in case of removal of e.g.:
  - chromate
  - heavy metal cyanide
- » recovery of noble metals, like gold and silver from cyanide solutions
- » acids removal from organic process streams, e.g. esters, ethers and aromatic hydrocarbons
- » removal of Bisphenol-A from waste water streams
- » removal of alkyl halides from carboxylic acids

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 Ion Exchange Resins.

## General Description

Ionic form as shipped	free base
Functional group	tertiary amine
Matrix	crosslinked polystyrene
Structure	macroporous
Appearance	beige, opaque

## Physical and Chemical Properties

		metric units	
Uniformity Coefficient*		max.	1.6
Bead size*	> 90 %	mm	0.4 - 1.25
Effective size*		mm	0.55 (+/- 0.05 )
Bulk density	(+/- 5 %)	g/l	620
Density		approx. g/ml	1.02
Water retention		wt. %	50 - 55
Total capacity*		min. eq/l	1.7
Volume change	free base --> Cl <sup>-</sup>	max. vol. %	45
Stability	at pH-range		0 - 14
Storability	of the product	max. years	2
Storability	temperature range	°C	-20 - 40

\* Specification values subjected to continuous monitoring.

## Recommended Operating Conditions\*

		metric units	
Operating temperature		max. °C	70
Operating pH-range			0 - 8
Bed depth		min. mm	800
Specific pressure drop	(15 °C)	approx. kPa*h/m <sup>2</sup>	1.1
Pressure drop		max. kPa	250
Linear velocity	operation	max. m/h	50
Linear velocity	backwash (20 °C)	approx. m/h	3
Bed expansion	(20 °C, per m/h)	approx. vol. %	30
Freeboard	backwash (extern / intern)	vol. %	100 - 120
Regenerant			NaOH
Counter current regeneration	level	approx. g/l	60
Counter current regeneration	concentration	wt. %	2 - 3
Linear velocity	regeneration	approx. m/h	5
Linear velocity	rinsing	approx. m/h	5
Rinse water requirement	slow / fast	approx. BV	3.5

\* 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.

## Additional Information & Regulations

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### 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.

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

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