

Lewatit® VP OC 1064 MD PH is a macroporous adsorber without functional groups. This monodisperse product (beads of a uniform size) possesses an excellent mechanical and osmotic stability. It is suitable for removing and adsorbing the following ingredients in the pharmaceutical industry, e.g. from waste water of process streams:

- Anionic, cationic and non-ionic surfactants
- Chlorinated and nitrated hydrocarbons
- Colorants or organic inert materials
- Residual amounts of liquid extractants, such as tributyl phosphate and di-2-ethylhexyl phosphate (D2EHPA)
- Non-polar organic ingredients with low molecular mass

Lewatit® VP OC 1064 MD PH exhibits the following properties:

- Very high mechanical stability
- Longer lifetime and better regeneration efficiency compared to activated carbon
- High adsorption capacity especially at medium and high feed concentration
- Good kinetics during adsorption and elution

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.

Common Description

Functional group	None
Matrix	Styrenic
Structure	Macroporous
Appearance	White, opaque

Typical Physical and Chemical Properties

Bulk density for shipment	(+/- 5%)	g/L	620
Density		approx. g/mL	1.02
Water retention (delivery form)		approx. weight %	54-63
Stability pH range			0-14
Stability temperature range		°C	1-120
Storability (from the time of delivery)		max. years	2
Surface BET		approx. m ² /g	800
Pore volume		approx. cm ³ /g	1.2
Pore diameter		approx. nm	5-10

Operation

Operating temperature		max. °C	120
Operating pH range	during exhaustion		0-14
Bed depth for single column		min. mm	1000
Back wash bed expansion per m/h (20°C)		%	80-100
Specific pressure loss kPa*h/m ² (15°C)		kPa*h/m ² (15°C)	1.5
Max. pressure loss during operation		kPa	250

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

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.

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