



Lewatit® ASB 1 P is a premium grade, gel, strong base type I anion exchange resin specially suited for high purity single or mixed bed applications, if a reduction of the silica concentration is necessary. With the polymer matrix of **Lewatit® ASB 1 P** being very easy accessible, it is possible to treat waters with a higher content of organic molecules such as tannic and fulvic acids.

Lewatit® ASB 1 P is produced on the basis of a cross-linked styrene divinylbenzene polymer. It is supplied in the form of spherical beads.

Lewatit® ASB 1 P has a high exchange capacity combined with an excellent stability to organic fouling. It contains a minimum amount of fines resulting in a low pressure drop.

Lewatit® ASB 1 P is available in the chloride form.

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.

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





Common Description

Delivery form	Cl [.]
Functional group	Quaternary ammonium
	Type 1
Matrix	Styrenic
Structure	Gel
Appearance	Yellow, translucent

Specified Data

Uniformity coefficient		max.	1.6
Effective size	d10	mm	0.44-0.56
Total capacity (delivery		min. eq/L	1.3
form)			

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Typical Physical and Chemical Properties

Bulk density for shipment (+/- 5%)	g/L	720
Density	approx. g/mL	1.1
Water retention (delivery form)	approx. weight %	49-56
Volume change (Cl ⁻ -OH ⁻)	max. approx. %	20
Stability pH range		0-14
Storage time (after delivery)	max. years	2
Storage temperature range	°C	-20 - +40

Operation

Operating temperature		max. °C	70
Operating pH range	during exhaustion		0-12
Bed depth for single column		min. mm	800
Bed depth per component in mixed bed		min. mm	500
Back wash bed expansion per m/h (20°C)		%	11
Specific pressure loss kPa*h/m² (15°C)		kPa*h/m² (15°C)	1
Max. pressure loss during operation		kPa	200
Specific flow rate		max. BV/h	60

Regeneration

NaOH regeneration	concentration	approx. wt. %	2-6
NaOH regeneration	quantity co-current	min. g/L resin	80
NaOH regeneration	quantity counter-current	min. g/L resin	50
Regeneration contact		min. minutes	20
time			
Slow rinse at		min. BV	2
regeneration flow rate			
Fast rinse at service flow		min. BV	2
rate			

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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.

Packaging

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

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