PRODUCT INFORMATION
LEWATIT® S 1567

Lewatit® S 1567 is a food grade, strongly acidic cation exchange resin with beads of uniform size (monodisperse) based an a styrene-divinylbenzene copolymer. **Lewatit® S 1567** is manufactured without the use of solvent.

The monodisperse beads are chemically and osmotically very stable, and they can effectively be disinfected for the drinking water processing. The optimized kinetics lead to an increased operating capacity compared to ion exchange resins with heterodisperse bead size distribution.

Lewatit® S 1567 is especially applicable for:

» softening in special systems with regular disinfection
» softening of drinking water

Lewatit® S 1567 is adding special features to the resin bed:

» high exchange flow rates during regeneration and loading
» a good utilization of the total capacity
» a low demand for rinse water
» homogeneous throughput of regenerants, water and solutions; therefore a homogeneous working zone
» nearly linear pressure drop gradient for the whole bed depth; therefore operation with higher bed depth is possible

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

Delivery form	Na^+
Functional group	Sulfonic acid
Matrix	Styrenic
Structure	Gel
Appearance	Dark brown

Specified Data

Uniformity coefficient		max.	1.1
Mean bead size	d50	mm	0.60 (+-0.05)
Total capacity (delivery form)		min. eq/L	2.0

Typical Physical and Chemical Properties

Bulk density for shipment	(+/- 5%)	g/L	810
Density		approx. g/mL	1.28
Water retention (delivery form)		approx. weight %	44-50
Stability pH range			0-14
Storage time (after delivery)		max. years	2
Storage temperature range		°C	-20 - +40

Operation

Operating temperature		max. °C	120
Operating pH range	during exhaustion		5-8
Bed depth for single column		min. mm	800
Back wash bed expansion per m/h (20°C)		%	4
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	40

Regeneration

NaCl regeneration	concentration	approx. wt. %	8-12
NaCl regeneration	quantity co-current	min. g/L resin	100
NaCl regeneration	quantity counter-current	min. g/L resin	70
Regeneration contact time		min. minutes	20
Slow rinse at regeneration flow rate		min. BV	2
Fast rinse at service flow rate		min. BV	2

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.

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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