

Lewatit® S 2568 is a food grade, macroporous, monodisperse, strongly acidic cation exchange resin based on a styrene-divinylbenzene copolymer.

Lewatit® S 2568 is especially applicable for:

- the decationization of solutions of organic products, e.g. sugar beet, sugar cane, starch sugar, glycerine, gelatin, collagen, and food acids, etc.
- the extraction of amino acids, e.g. lysine
- the softening of solutions, especially of sugar thin juices

Lewatit® S 2568 is adding special features to the resin bed:

- high exchange flow rates during regeneration and loading
- a good utilization of the capacity
- a low rinse water demand
- homogeneous throughput of regenerants, water and solutions; therefore an homogeneous working zone
- nearly linear pressure drop gradient for the whole bed depth; therefore an operation with higher bed depth possible
- good separation behaviour of the components in a mixed bed application

If using **Lewatit® S 2568** to treat potable water and the aqueous solutions listed above, special care should be given to the initial cycles of the new resin. Please refer to the recommended start-up conditions available on request.

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 | Macroporous |
| Appearance | Beige-gray, opaque |

Specified Data

| | | | |
|--------------------------------|-----|-----------|-----------|
| Uniformity coefficient | | max. | 1.1 |
| Mean bead size | d50 | mm | 0.60-0.70 |
| Total capacity (delivery form) | | min. eq/L | 1.7 |

Typical Physical and Chemical Properties

| | | | |
|---|----------|------------------|-----------|
| Bulk density for shipment | (+/- 5%) | g/L | 740 |
| Density | | approx. g/mL | 1.2 |
| Water retention (delivery form) | | approx. weight % | 50-55 |
| Volume change (Na ⁺ - H ⁺) | | max. approx. % | 10 |
| Stability pH range | | | 0-14 |
| Stability temperature range | | °C | 1-120 |
| Storage time (after delivery) | | max. years | 2 |
| Storage temperature range | | °C | -20 - +40 |

Operation

| | | | |
|--|-------------------|-----------------------------|--------|
| Operating temperature | | max. °C | 120 |
| Operating pH range | during exhaustion | | 0-14 |
| Bed depth for single column | | min. mm | 800 |
| Back wash bed expansion per m/h (20°C) | | % | 4 |
| Specific pressure loss kPa*h/m ² (15°C) | | kPa*h/m ² (15°C) | 0.8 |
| Max. pressure loss during operation | | kPa | 300 |
| Specific flow rate | | max. BV/h | 5 |
| Freeboard | during backwash | min. vol. % | 80-100 |

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

Regeneration

| | | | |
|---|--------------------------|----------------|-------|
| HCl regeneration | concentration | approx. wt. % | 4-6 |
| HCl regeneration | quantity co-current | min. g/L resin | 100 |
| HCl regeneration | quantity counter-current | min. g/L resin | 55-65 |
| H ₂ SO ₄ regeneration | concentration | approx. wt. % | 1.5-3 |
| H ₂ SO ₄ regeneration | quantity co-current | min. g/L resin | 150 |
| H ₂ SO ₄ regeneration | quantity counter-current | min. g/L resin | 100 |
| NaCl regeneration | concentration | approx. wt. % | 8-10 |
| NaCl regeneration | quantity co-current | min. g/L resin | 200 |
| NaCl regeneration | quantity counter-current | min. g/L resin | 100 |
| Regeneration contact time | | min. minutes | 20 |
| Slow rinse at regeneration flow rate | | min. BV | 2 |
| Fast rinse at service flow rate | | min. BV | 4 |

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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 conditions

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.

Storage time

The recommended storage time for this product is explained in the technical document "Technical guidelines on the storage of Lewatit® ion exchange resins" available for download on our website. Please use the following link for more information: <https://lanxess.com/en/products-and-brands/brands/lewatit/literature>

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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