PRODUCT INFORMATION
LEWATIT® S 2568

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 Corporation.

Common Description

Delivery form	Na^+
Functional group	Sulfonic acid
Matrix	Styrenic
Structure	Macroporous
Appearance	Beige-gray, opaque

Specified Data

		US Units			
Uniformity coefficient				max.	1.1
Mean bead size	d50			mm	0.60-0.70
Total capacity (delivery form)		kgr/ft³	37	min. eq/L	1.7

Typical Physical and Chemical Properties

		US Units		Metric Units	
Bulk density for shipment	(+/- 5%)	lb/ft³	46	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
Storability temperature range				°C	-20 - +40

Operation

		US Units		Metric Units	
Operating temperature		max. °F	248	max. °C	120
Operating pH range	during exhaustion				0-14
Bed depth for single column		min. inches	31	min. mm	800
Back wash bed expansion per m/h (20°C)				%	4
Specific pressure loss (15°C)				kPa*h/m²	0.8
Max. pressure loss during operation		PSI	44	kPa	300
Specific flow rate		max. gpm/ft3	0.63	max. BV/h	5
Freeboard	during backwash			min. vol. %	80-100

Regeneration

		US Units		Metric Units	
HCl regeneration	concentration	approx. wt. %	4-6	approx. wt. %	4-6
HCl regeneration	quantity co-current	min. lb/ft³	6.3	min. g/L resin	100
HCl regeneration	quantity counter-current	min. lb/ft³	3.4-4.1	min. g/L resin	55-65
H_2SO_4 regeneration	concentration	approx. wt. %	1.5-3	approx. wt. %	1.5-3
H_2SO_4 regeneration	quantity co-current	min. lb/ft³	9.4	min. g/L resin	150
H_2SO_4 regeneration	quantity counter-current	min. lb/ft³	6.3	min. g/L resin	100
NaCl regeneration	concentration	approx. wt. %	8-10	approx. wt. %	8-10
NaCl regeneration	quantity co-current	min. lb/ft³	12.5	min. g/L resin	200
NaCl regeneration	quantity counter-current	min. lb/ft³	6.3	min. g/L resin	100
Regeneration contact time		min. minutes	20	min. minutes	20
Slow rinse at regeneration flow rate		min. gal/ft³	15	min. BV	2
Fast rinse at service flow rate		min. gal/ft³	30	min. BV	4

Additional Information & Regulations

PRODUCT SAFETY INFORMATION REQUIRED FOR SAFE USE OF PRODUCTS MENTIONED HEREIN IS NOT INCLUDED IN THIS DOCUMENT. BEFORE HANDLING ANY PRODUCT, ALWAYS READ PRODUCT AND SAFETY DATA SHEETS AND CONTAINER LABELS FOR SAFE USE, PHYSICAL AND HEALTH HAZARD INFORMATION.

Safety precautions
Strong oxidants, e.g. nitric acid, can cause violent reactions if they come into contact with ion exchange resins.

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.

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

The manner in which you use and the purpose to which you put and utilize our products, technical assistance and information (whether verbal, written or by way of production evaluations), including any suggested formulations and recommendations are beyond our control. Therefore, it is imperative that you test our products, technical assistance and information to determine to your own satisfaction whether they are suitable for your intended uses and application. This application-specific analysis must at least include testing to determine suitability from a technical as well as health, safety, and environmental standpoint. Such testing has not necessarily been done by us. Unless we otherwise agree in writing, all products are sold strictly pursuant to the terms of our standard conditions of sale. All information and technical assistance is given without warranty or guarantee and is subject to change with notice. It is expressly understood and agreed that you assume and hereby expressly release us from liability, in tort, contract or otherwise, incurred in connection with the use of our products, technical assistance, and information. Any statement or recommendation not contained herein is unauthorized and shall not bind us. Nothing herein shall be construed as a recommendation to use any product in conflict with patents covering any material or its use. No license is implied or in fact granted under the claims of any patent.

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Regulatory Compliance Information: Some of the end uses of the products described in this publication must comply with applicable regulations, such as the FDA, BfR, NSF, USDA, and CPSC. If you have any questions on the regulatory status of these products, contact - for business in the USA - the LANXESS Corporation Regulatory Affairs and Product Safety Department in Pittsburgh, PA, USA or for business outside US the Regulatory Affairs and Product Safety Department of LANXESS Deutschland GmbH in Germany.

Note: The information contained in this publication is current as of the date of edition. Please contact LANXESS Corporation Inc. to determine if this publication has been revised.

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