Lewatit® MonoPlus S 107 NS – a New Monodisperse Gel-type Cation Exchanger for Demineralization

The new monodisperse strong acid cation exchange (SAC) resin from the Lewatit® product family provides economically priced quality for monodisperse resins performance in standard demineralization applications.

- Modern monodisperse non-solvent production
- Different approvals for food applications
- Stable monodisperse matrix with fast kinetic properties
- Low fine and coarse bead content
- Low rinse-water demand
- Low chemicals demand

Lewatit® MonoPlus S 107 NS can be used as a cation exchanger resin component in standard makeup water applications.

Advantages

In combination with the monodisperse properties we offer an economic basic-quality resin for makeup water systems.

- Fluidized bed system
- Reverse fluidized bed systems
- Counterflow, counterpressure systems
- Co-flow systems
- Low pressure drop
- Reduced rinse-water consumption

Through the special non-solvent production process the resin can also be used in most food and beverage industry demineralization applications.
Health and Safety Information: Appropriate literature has been assembled which provides information concerning the health and safety precautions that must be observed when handling the LANXESS products mentioned in this publication. For materials mentioned which are not LANXESS products, appropriate industrial hygiene and other safety precautions recommended by their manufacturers should be followed. Before working with any of these products you must read and become familiar with the available information on their hazards, proper use and handling. This cannot be overemphasized. Information is available in several forms, e.g., material safety data sheets, product information and product labels. Consult your LANXESS representative for further information.

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 your LANXESS representative.

The purpose and manner in which you utilize our products, technical assistance and information (whether verbal written or by 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 applications. 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 without 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 any warranty of non-infringement is expressly disclaimed.

Note: The information contained in this publication is current as of October, 2017. Please contact your LANXESS representative to determine if this publication has been revised.

We are happy to support your business. Please contact us for additional information: visit www.lpt.lanxess.com

Lewatit® MonoPlus S 107 NS

Ionic form as shipped

\( \text{SO}_3^- \text{Na}^+ \) Lewatit® MonoPlus S 107 NS

Strongly acidic cation exchange resin

- Gel
- Monodisperse
- Functional group: sulfonic acid

Features

- Low chemicals demand
- High chemical and mechanical stability
- Low fine and coarse bead content

Operating capacity Lewatit® MonoPlus S 107 NS

Test conditions:

- **System:** WS (countercurrent system)
- **Flow rate:** 20 BV/h
- **Feed water:** Leverkusen tap water approx. 500 μS/cm
- **Temperature:** 20°C

Breakthrough point 10 μS/cm after strong basic anion exchanger

<table>
<thead>
<tr>
<th>HCl (100%) g/l resin as 6% solution</th>
<th>Operating capacity [eq/l]</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.50</td>
<td>0.70</td>
</tr>
<tr>
<td>0.70</td>
<td>0.90</td>
</tr>
<tr>
<td>0.90</td>
<td>1.10</td>
</tr>
<tr>
<td>1.10</td>
<td>1.30</td>
</tr>
<tr>
<td>1.30</td>
<td>1.50</td>
</tr>
<tr>
<td>1.50</td>
<td>1.70</td>
</tr>
<tr>
<td>1.70</td>
<td>1.90</td>
</tr>
</tbody>
</table>

Contact

LANXESS Deutschland GmbH
Liquid Purification Technologies
Kennedyplatz 1
50569 Cologne, Germany
Phone: +49-221-8885-0
E-mail: lewatit@lanxess.com

Operating capacity Lewatit® MonoPlus S107 NS

Test conditions:

- **System:** WS (countercurrent system)
- **Flow rate:** 20 BV/h
- **Feed water:** Leverkusen tap water approx. 500 μS/cm
- **Temperature:** 20°C

Breakthrough point 10 μS/cm after strong basic anion exchanger

<table>
<thead>
<tr>
<th>HCl (100%) g/l resin as 6% solution</th>
<th>Operating capacity [eq/l]</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.50</td>
<td>0.70</td>
</tr>
<tr>
<td>0.70</td>
<td>0.90</td>
</tr>
<tr>
<td>0.90</td>
<td>1.10</td>
</tr>
<tr>
<td>1.10</td>
<td>1.30</td>
</tr>
<tr>
<td>1.30</td>
<td>1.50</td>
</tr>
<tr>
<td>1.50</td>
<td>1.70</td>
</tr>
<tr>
<td>1.70</td>
<td>1.90</td>
</tr>
</tbody>
</table>

Contact

LANXESS Deutschland GmbH
Liquid Purification Technologies
Kennedyplatz 1
50569 Cologne, Germany
Phone: +49-221-8885-0
E-mail: lewatit@lanxess.com