

Lewatit® Ultrapure 1294 MD is a “ready to use” mixed bed for final polishing in semiconductor applications.

The high grade gel type components are intensively purified to achieve highest purity water conditions.

By special internal conversion technique of the SBA component, **Lewatit® Ultrapure 1294 MD** has very high capacity for boron and silica.

Due to the delicate mixing to an equivalent mix bed ratio the particle release is extremely low.

The performance of each produced batch number of **Lewatit® Ultrapure 1294 MD** is checked.

The gel type components have a narrow diameter distribution, thus the ready to use mixed bed can be easily separated for regeneration in mixed bed systems.

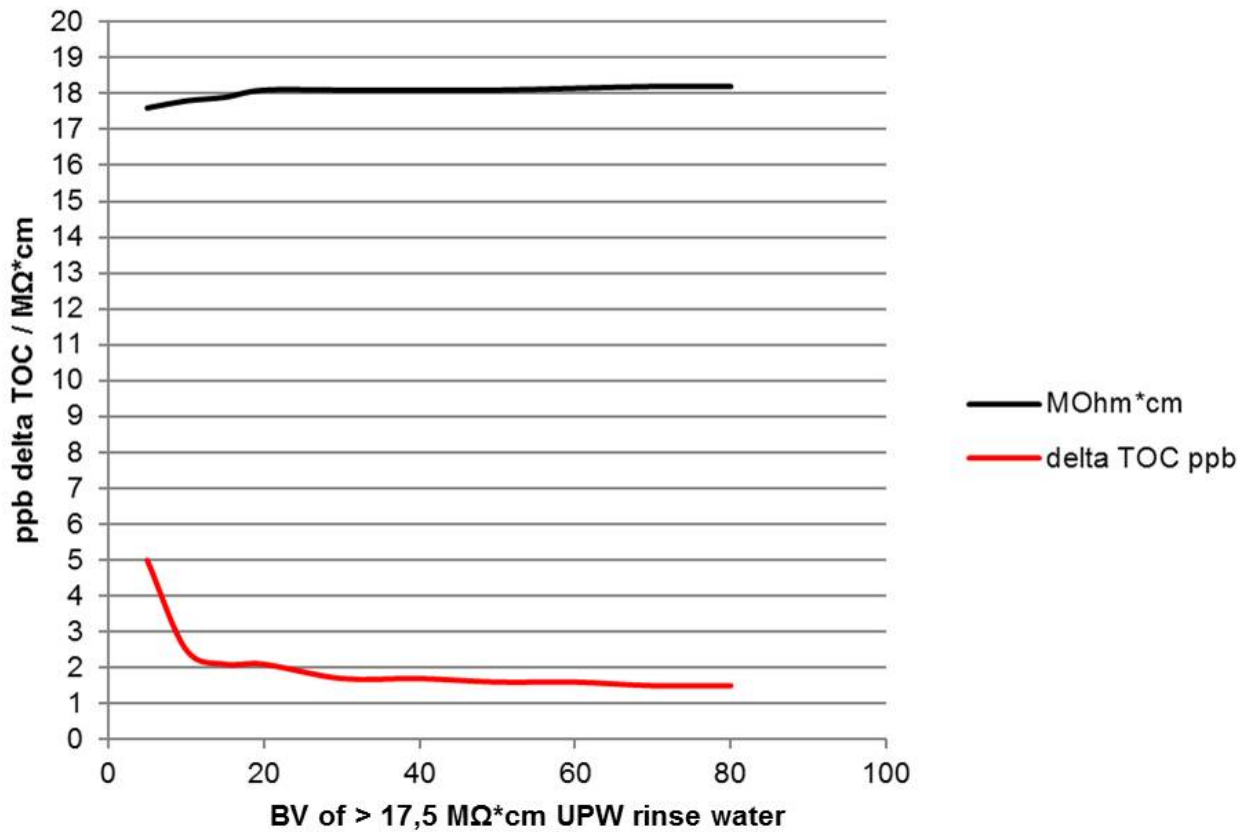
By reason of the monodisperse production the resin mixture has a very high physical and chemical stability.

High metric flow rates with low pressure loss are possible.

You will receive **Lewatit® Ultrapure 1294 MD** in special packaging which avoids any external contamination.

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.

Typical rinse performance
Lewatit® UP 1294 MD



Common Description

| | |
|------------------|--|
| Delivery form | H ⁺ /OH ⁻ |
| Functional group | quaternary ammonium, type 1 /sulfonic acid |
| Matrix | styrenic |
| Structure | gel |
| Appearance | dark brown, light brown translucent |

Specified Data

| | | | |
|---|-----|-----------|---------------|
| Uniformity coefficient (SAC component) | | max. | 1.1 |
| Uniformity coefficient (SBA component) | | max. | 1.1 |
| Mean bead size (SAC component) | d50 | mm | 0.60 (+-0.05) |
| Mean bead size (SBA component) | d50 | mm | 0.67 (+-0.06) |
| Total capacity (SAC component H ⁺ form) | | min. eq/L | 2.1 |
| Total capacity (SBA component OH ⁻ form) | | min. eq/L | 1.1 |

Typical Physical and Chemical Properties

| | | US Units | | Metric Units | |
|-----------------------------------|----------|--------------------|----|----------------|-----------|
| Bulk density for shipment | (+/- 5%) | lb/ft ³ | 44 | g/L | 710 |
| Density | | | | approx. g/mL | 1.14 |
| Volume change (during exhaustion) | | | | max. approx. % | -15 |
| Stability pH range | | | | | 0 - 14 |
| Storage time (after delivery) | | | | max. years | 1 |
| Storability temperature range | | | | °C | -20 - +40 |

Operation

| | | US Units | | Metric Units | |
|-------------------------------------|-------------------|--------------------------|-----|----------------------|--------|
| Operating temperature | | max. °F | 104 | max. °C | 40 |
| Operating pH range | during exhaustion | | | | 0 - 14 |
| Bed depth for single column | | min. inches | 24 | min. mm | 600 |
| Specific pressure loss (15°C) | | | | kPa*h/m ² | 1 |
| Max. pressure loss during operation | | PSI | 29 | kPa | 200 |
| Specific flow rate | | max. gpm/ft ³ | 13 | max. BV/h | 100 |

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.

PRODUCT INFORMATION

LEWATIT® UltraPure 1294 MD



Headquarters: 54/18 Bui Quang La, Ward 12, Go Vap District, HCMC, Viet Nam
Office: 12 DHT10B, Dong Hung Thuan Ward, District 12, HCMC, Viet Nam
Phone: (028) 6258 5368 - (028) 6291 9568
Email: info@atswatertechnology.com
Website: www.atswatertechnology.com

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.

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 Corporation products mentioned in this publication. For materials mentioned which are not LANXESS Corporation 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., *safety data sheets and product labels*. Consult your LANXESS Corporation representative or contact the Product Safety and Regulatory Affairs Department at LANXESS Corporation

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.

LANXESS Corporation
111 RIDC Park West Dr
12275-1112 Pittsburgh-Allegheny
USA

+1-800-678-0020
lewatit@lanxess.com

www.lanxess.com
www.lpt.lanxess.com

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