# PRODUCT INFORMATION
# LEWATIT® K 2649

**Lewatit® K 2649** is a strongly acidic, macroporous, polymer-based resin in spherical bead form, with sulfonic acid groups. It has been dried and is thus ideally suited for processes requiring anhydrous conditions. A large pore structure, high degree of crosslinking and good mechanical stability enable this resint to be used in polar and non-polar media**,** particularly in the following applications:

- Phenol alkylations with olefins
- Olefin oligomerizations
- Esterifications and etherifications
- Alkylation of larger polar and non-polar molecules

In reactions involving the use or the generation of water **Lewatit® K 2649** should be substituted by **Lewatit® K 2629.**

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 | $H^+$ |
| Functional group | sulfonic |
| Matrix | styrenic |
| Structure | macroporous |
| Appearance | beige, opaque |

## Specified Data

| | | | |
|---|---|---|---|
| Uniformity coefficient | | max. | 1.6 |
| Range of size for >90 vol% of all beads | | mm | 0.4 - 1.25 |
| Total capacity (dry resin) | | min. eq/kg | 4.7 |

## Typical Physical and Chemical Properties

| | | | |
|---|---|---|---|
| Bulk density for shipment | (+/- 5%) | g/L | 600 |
| Density | | approx. g/mL | 1.19 |
| Stability temperature range | | °C | 1-130 |
| Storage temperature range | | °C | -20 - +40 |
| Surface BET | | approx. $m^2/g$ | 40 |
| Pore volume | | approx. $cm^3/g$ | 0.3 |
| Pore diameter | | approx. nm | 33 |

## Operation

| | | | |
|---|---|---|---|
| Operating temperature | | max. °C | 130 |
| Operating pH range | during exhaustion | | 0-14 |
| Bed depth for single column | | min. mm | 1000 |
| Max. pressure loss during operation | | kPa | 250 |

## 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.



**LANXESS Deutschland GmbH**
Liquid Purification Technologies
Kennedyplatz 1
50569 Koeln
Germany

+49-221-8885-0
lewatit@lanxess.com

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