

Lewatit® K 2620 is a strongly acidic, macroporous, polymer-based catalyst in spherical bead form, with sulfonic acid groups. It is ideally suited for processing aqueous and organic liquids. A special process has been used to hyper-activate the sulfonic acid groups of the reactive centres, increasing the acidity and reactivity of this polymer relative to conventional catalysts. The large pore structure favours the transport of reactants to the reactive centers. A high degree of cross-linking, coupled with a compact bead structure result in high chemical and mechanical stability, enabling **Lewatit® K 2620** to be used in polar and non-polar media for the following applications :

- Production of the gasoline additives MTBE, ETBE and TAME
- Alkylation of larger polar and non-polar molecules, especially phenol alkylations
- Hydration of olefins
- Esterification and etherification
- Condensation reactions

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	dark, opaque

Specified Data

Uniformity coefficient		max.	1.6
Range of size for >90 vol% of all beads		mm	0.40-1.25
Effective size	d10	mm	0.50-0.62
Total capacity (delivery form)		min. eq/L	1.9

Typical Physical and Chemical Properties

Bulk density for shipment	(+/- 5%)	g/L	760
Density		approx. g/mL	1.22
Water retention (delivery form)		approx. weight %	50-55
Stability temperature range		°C	1-140
Storage temperature range		°C	-20 - +40
Surface BET		approx. m ² /g	33
Pore volume		approx. cm ³ /g	0.45
Pore diameter		approx. nm	41

Operation

Operating temperature		max. °C	140
Operating pH range	during exhaustion		0-14
Bed depth for single column		min. mm	800
Max. pressure loss during operation		kPa	250

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

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.

LENNTECH

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