



**Lewatit® K 7333** is a strongly basic, gel-type, palladium-doped, polymer-based resin in spherical bead form. It is designed to remove dissolved oxygen from water. A suitable reducing agent such as hydrogen is dissolved in the water to be treated and then passed through a bed of the resin.

By this method, residual oxygen concentrations of less than 20 ppb can be obtained at flow rates up to 80 BV/h.

**Lewatit® K 7333** is especially suitable for the removal of dissolved oxygen in the production of ultrapure water.

Note: A loss of catalytic activity may be caused by the presence of poisons such as mercury, cadmium, sulfides, organic contaminants such as humates or by microbial growth. Maximum catalytic activity can only be maintained in the presence of sufficient quantities of dissolved reducing agent.

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.

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





## Common Description

Delivery form	OH <sup>-</sup> / Pd
Functional group	quarternary ammonium
Matrix	styrenic
Structure	gel
Appearance	grey, transparent

## **Specified Data**

	Uniformity coefficient		max.	1.1
ſ	Mean bead size	d50	mm	0.64 (+/- 0.05)

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## Typical Physical and Chemical Properties

Bulk density for shipment	(+/- 5%)	g/L	700
Density		approx. g/mL	1.07
Water retention (delivery form)		approx. weight %	58-63
Stability pH range			5-14
Stability temperature range		°C	1-40
Storage time (after delivery)		max. years	2
Storage temperature range		°C	-20 - +40

## Operation

Operating temperature		max. °C	40
Operating pH range	during exhaustion		5-14
Bed depth for single column		min. mm	900
Back wash bed expansion per m/h (20°C)		%	10
Specific pressure loss kPa*h/m² (15°C)		kPa*h/m² (15°C)	1.1
Max. pressure loss during operation		kPa	250
Specific flow rate		max. BV/h	80

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### 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.



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