PRODUCT INFORMATION
LEWATIT® MonoPlus SR 7

LEWATIT® MonoPlus SR 7 is a macroporous, polystyrene based, monodisperse, nitrate selective anion exchange resin.

LEWATIT® MonoPlus SR 7 has three times the selectivity for nitrates of any commercially available anion exchange resin, which enables it to remove nitrates from sulfate-bearing waters without the danger of nitrate dumping. Dumping occurs in other resins when the nitrate capacity is exhausted and sulfate ions push nitrate ions off the active sites. When this occurs, the effluent will contain more nitrate than the influent.

LEWATIT® MonoPlus SR 7 is ideal for small municipal systems and residential point-of-entry and point-of-use cartridges, because these have a tendency to be overrun and cause nitrates to be dumped.

LEWATIT® MonoPlus SR 7 has been specially prepared to meet drinking water standards and has passed taste and odor tests.

LEWATIT® MonoPlus SR 7 is especially suitable for the following applications:

- nitrate removal from drinking water
- nitrate removal from waste water
- nitrate removal from aquarium and fish farming water
- nitrite removal from water
- iodide removal from water
- chlorate removal from concentrated NaOH
- ...

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 Ion Exchange Resins.

General Description

Ionic form as shipped	Cl-
Functional group	quaternary amine
Matrix	crosslinked polystyrene
Structure	macroporous
Appearance	white opaque

Physical and Chemical Properties

		metric units	
Uniformity Coefficient*		max.	1.1
Mean bead size*		mm	0.57 - 0.67
Bulk density	(+/- 5 %)	g/l	630
Density		approx. g/ml	1.02
Water retention		wt. %	59 - 64
Total capacity*		min. eq/l	0.6
Volume change	Cl^- --> NO_3^-	max. vol. %	5
Stability	at pH-range		0 - 14
Stability	temperature range	°C	- 20 - 40
Storability	of the product	max. years	2
Storability	temperature range	°C	-20 - 40

Recommended Operating Conditions*

		metric units	
Operating temperature		max. °C	80
Bed depth		min. mm	800
Specific pressure drop	(15 °C)	approx. kPa*h/m²	1.3
Pressure drop		max. kPa	250
Linear velocity	operation	max. m/h	30
Linear velocity	backwash (20 °C)	approx. m/h	6
Bed expansion	(20 °C, per m/h)	approx. vol. %	18
Freeboard	backwash (extern / intern)	vol. %	80 - 100
Regenerant			NaCl
Counter current regeneration	level	approx. g/l	80 - 300
Counter current regeneration	concentration	wt. %	8 - 10
Linear velocity	regeneration	approx. m/h	5
Linear velocity	rinsing	approx. m/h	5
Rinse water requirement	slow / fast	approx. BV	5

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.

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For more information or a quote, please use the

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