PRODUCT INFORMATION
LEWATIT® MonoPlus TP 207 XL

Lewatit® MonoPlus TP 207 XL is a weakly acidic, macroporous cation exchange resin with chelating iminodiacetate groups for the selective extraction of heavy metal cations from weakly acidic to weakly basic solutions. Divalent cations are removed from neutralized waters in the following order:
Copper > Vanadium (VO) > Uranium (UO_2) > Lead > Nickel > Zinc > Cadmium > Iron(II) > Beryllium > Manganese > Calcium > Magnesium > Strontium > Barium >>> Sodium.

Lewatit® MonoPlus TP 207 XL is of monodispersed bead size distribution, means beads of uniform size. The especially enlarged bead size is combined with a high mechanical and osmotic stability. The resin is characterized by high kinetics leading to a good utilization of the available capacity. Therefore it is in particular suitable for the use in the following application:

» Concentration, extraction and recovery of heavy metals from hydrometallurgical solutions, especially by Resin-in-Pulp processes

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	Na+
Functional group	iminodiacetic acid
Matrix	crosslinked polystyrene
Structure	macroporous
Appearance	beige, opaque

Physical and Chemical Properties

		metric units	
Total capacity*	H-Form	min. eq/l	2.0
Uniformity Coefficient*		max.	1.1
Mean bead size*		mm	0.79 (+/- 0.05)
Bulk density	(+/- 5 %)	g/l	720
Density		approx. g/ml	1.1
Water retention		wt. %	55 - 60
Volume change	Na^+ --> H^+	max. vol. %	-25
Stability	at pH-range		0 - 14
Storability	of the product	max. years	2
Storability	temperature range	℃	- 20 - +40

* Specification values subjected to continuous monitoring.

Recommended Operating Conditions*

		metric units	
Operating temperature		max. °C	80
Operating pH-range			1.5 - 9
For Regeneration, Conditioning and Washing			
Bed depth		min. mm	1000
Specific pressure drop	(15 °C)	approx. kPa*h/m²	1.1
Pressure drop		max. kPa	250
Linear velocity	backwash (20 °C)	approx. m/h	10
Bed expansion	(20 °C, per m/h)	approx. vol. %	4
Freeboard	backwash (extern / intern)	vol. %	80
Regenerant			HCl or H_2SO_4
Regenerant concentration	(depending on application)	approx. wt. %	5 - 20
Linear velocity	regeneration	approx. m/h	5
Linear velocity	rinsing	approx. m/h	5
Conditioning			NaOH
Conditioning	concentration	approx. wt. %	4
Linear velocity	conditioning	approx. m/h	5
Linear velocity	rinsing	approx. m/h	5
Rinse water requirement	slow / fast	approx. BV	5
Rinse water requirement		approx. BV	5

*e. g. for Resin-in-Pulp

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.

LENNTECH
Water Treatment Solutions
info@lenntech.com Tel. +31-152-610-900
www.lenntech.com Fax. +31-152-616-289

For more information or a quote, please use the

Contact Form