

Product Information

Relite™ JS010

Relite™ JS010 is an iminodiacetate type chelating resin. It has a high selectivity for multivalent metal ions, especially transition metal elements like Fe(III) and Cu(II), than monovalents. It also provides rapid kinetics, high operating capacity, low swelling and shrinking ratio, and excellent mechanical stability. It is recommended for chemical process separations, and metals removal and recovery from wastewater.

The selectivity of Relite™ JS010 toward metal ions :

$\text{Cr}^{3+} > \text{In}^{3+} > \text{Fe}^{3+} > \text{Ce}^{3+} > \text{Al}^{3+} > \text{La}^{3+} > \text{Hg}^{2+} > \text{UO}^{2+} > \text{Cu}^{2+} > \text{VO}^{2+} > \text{Pb}^{2+} > \text{Ni}^{2+} > \text{Cd}^{2+} > \text{Zn}^{2+} > \text{Co}^{2+} > \text{Fe}^{2+} > \text{Mn}^{2+} > \text{Be}^{2+} > \text{Ca}^{2+} > \text{Mg}^{2+} > \text{Sr}^{2+}$

Product		
Grade Name		Relite™ JS010
Type		Chelating Resin
Matrix		Styrene-DVB, Highly Porous
Chemical Structure		
Functional Group		Iminodiacetate
Ionic Form		Na^+
Specification		
Whole Bead Count	-	90 min.
Cu Adsorption Capacity	mmol/mL	0.6 min.
Water Content	%	52 - 58
Particle Size Distribution on 1200 μm	%	5 max.
Particle Size Distribution thr. 300 μm	%	1 max.
Effective Size	mm	0.45 - 0.55
Uniformity Coefficient	-	1.7 max.

Recommended Operating Conditions

Maximum Operating Temperature	°C	120 (Na ⁺) 80 (H ⁺)
Effective pH Range		4* - 10**
Minimum Bed Depth	mm	800
Service Flow Rate	BV/h	10 - 30
Regenerant		HCl
Regenerant Concentration	%	HCl 4 - 10
Regenerant Level	g/L	100 - 200
Regenerant Flow Rate	BV/h	2 - 10
Total Rinse Requirement	BV	10 - 20

1 BV(Bed Volume)=1 m³/m³-resin

*Some metal ions can be slightly adsorbed at a pH lower than 4.

**In an alkaline solutions, ions may be precipitated as hydroxides.

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