

**•Descriptions**

Seplife® Chelex7350 is a highly cross-linked iminodiacetic acrylate carrier that has the appearance of white spherical beads. The particle size distribution is 100-250 micron. The resin is highly hydrophilic and has a porous structure combined with a very high surface area which is ideal for immobilization of enzymes. Iminodiacetic acrylate resins are ideal enzyme carriers for enzymes that are expressed with a His-tag. The iminodiacetic group, upon chelation with a bivalent ion as Fe<sup>2+</sup>, Zn<sup>2+</sup>, Cu<sup>2+</sup>, Co<sup>2+</sup>, Ni<sup>2+</sup>, forms very strong affinity binding with the histidine groups of the His tag for the proteins. The great advantage of using affinity immobilization of enzyme is the possibility to perform in a single step the purification and immobilization, thus optimizing all the downstream processing. The resins are mechanically very strong and can be used in either stirred tank or bed reactor.

The high cross-linking of the resin ensures extremely high mechanical stability thus allowing the possibility to reuse the immobilized enzyme for many cycles.

**•Physical and Chemical Characteristics**

Matrix	Polyacrylate
Appearance	White Opaque Spherical beads
Functional group	Iminodiacetic (Na <sup>+</sup> )
Immobilized method	Affinity
Moisture content (%)	60-70
Shipping weight (g/ml)	0.70-0.80
Particle size (µm)	100-250
Pore size (Å)	800-1000
Surface area (m <sup>2</sup> /g)	≥ 120
Chemical stability	The resin is insoluble in water, acid, alkali and methanol, ethanol, acetone, toluene, n-heptane, DMSO and other organic solvents.
Immobilization pH	4-10

**•Key features and Benefits**

- Easy immobilization through affinity of iminodiacetic group and histidines
- Good physical and chemical stability
- Long lifetime

**•Recommended Storage Conditions**

Recommended temperature of storage (°C)	2-20
Shelf life	3 years

**•Precautions**

Resins should be stored in sealed containers or bags where temperature was 2-20°C in dry conditions without exposure to direct sunlight.

Do not mix ion exchange resin with strong oxidizing agents; otherwise, it will cause violent reactions.  
 In case of eyes contact with resins, rinse eyes immediately with plenty of water, and consult a specialist.  
 Material and samples must be disposed according to local regulations.  
 Dry polymers will expand when become wetted and may cause an exothermic reaction.  
 Spilled materials on the floor can cause slippery conditions.

**·Ordering Information**

Product Name	Reference number	Packing size
Seplife® Chelex7350	PM057S01	500g
	PM057S02	1kg
	PM057S03	5kg
	PM057S04	10kg
	PM057S05	25kg

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