



# **Resinex**<sup>™</sup> **HM-P92-C** Strong base anion exchange resin

**Resinex<sup>™</sup> HM-P92-C** is a high purity, premium grade, strongly basic macroporous anion exchange resin type 1. The macroporous crosslinked matrix offers a very high resistance to physical breakage and organic fouling. Its remarkable physical stability makes it highly suitable for the extraction of uranium. The selected bead distribution of **Resinex<sup>™</sup> HM-P92-C** is especially adapted for the Uranium extraction process (e.g. Resin-In-Pulp process)

### **Typical Properties**

Туре	Crosslinked polystyrene divinylbenzene
Form	macroporous, milky white, spherical beads
Functional group	Quaternary amine, Type 1
Whole bead count	95% min.
lonic form, as shipped	CI
Bead size	0.80 - 2.50 mm
Uniformity coefficient	1.60 max.
Bulk density, as shipped	670 kg/m <sup>3</sup>
Real density	1.08 g/cm <sup>3</sup>
Water retention	50 - 60%
Total capacity (Cl <sup>-</sup> form)	1.15 eq/l min.
Volume change Cl <sup>-</sup> -> OH <sup>-</sup>	8% max.
Stability, temperature	60°C max.
Stability, pH	0 - 14

# Key Features and Benefits

- High Integrity Beads
  Excellent resistance to mechanical
  degradation ensures low pressure drop
- Excellent Resistance To Organic Fouling Removable organics
- Resistance To Osmotic Shock
  Extended lifetime and very low number of
  broken beads
- Selected Bead Size Lower pressure drop

### Typical Applications

Uranium extraction processes

## **Standard Design Conditions**

Bed depth	> 700 mm
Service flow rate	8 - 40 BV/h
Backwash expansion	50 - 75%

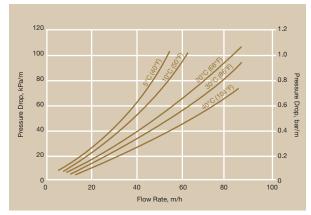
#### **Standard Packaging**

- 25 lit. PE valve bag
- 1000 litre big bag





#### Pressure Drop



120

**Backwash Expansion** 

Standard Regeneration Parameters	Co-Flow	Counter-Flow	
Concentration	4% NaOH	2% NaOH	
Level	60-150 g/l	50-80 g/l	
Flow rate regenerant	4-6 BV/h	6-8 BV/h	
Contact time regenerant	30-60 min.	20-40 min.	
Flow rate slow rinse	4-6 BV/h	6-8 BV/h	
Slow rinse water required	2-4 BV	2 BV	
Flow rate fast rinse	10-30 BV/h	10-30 BV/h	
Fast rinse water required	6-10 BV	6-10 BV	

The use of a weak base solution such as ammonia or sodium carbonate as a regenerant is an alternative to caustic soda. Please contact your nearest Jacobi Carbons sales office for further information.

CAUTION Strong oxidizing agents such as nitric acid can react violently with ion exchange resins and cause explosive type reactions. Before using strong oxidants, consult sources knowledgeable in the handling of these materials

#### **Product Packing**



25 lit. polyethylene valve bag 48 bags per pallet



Polypropylene FIBCs (big bag), 1.000 lit.





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