

# Resinex™ HM-92-4 UB

## Strong base anion exchange resin

**Resinex™ HM-92-4 UB** is a high purity, premium grade, strongly basic gel-type anion exchange resin type 1, specially designed for the extraction of Uranium in the RIP process. The product is a bead type, crosslinked polystyrene-divinylbenzene copolymer resin that offers a good resistance to physical and mechanical breakage and organic fouling.

The uniform bead size of **Resinex™ HM-92-4 UB** ensures a low pressure drop during the service run and ensures a maximum performance of the process.

### Typical Properties

Type	Crosslinked polystyrene divinylbenzene
Form	gel-type, white, spherical beads
Functional group	Quarternary Ammonium, Type 1
Whole bead count	95% min.
Ionic form, as shipped	Cl <sup>-</sup>
Bead size	(≥ 90%) 0.50 - 0.71 mm
Uniformity coefficient	1.20 max.
Bulk density, as shipped	670 kg/m <sup>3</sup>
Real density	1.06 g/cm <sup>3</sup>
Water retention	50 - 56%
Total capacity (Cl <sup>-</sup> form)	1.30 eq/l min.
Volume change Cl <sup>-</sup> → SO <sub>4</sub> <sup>2-</sup>	10% 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
- **High Capacity For Uranium**
- **Selected Bead Size**  
Low pressure drop
- **Resistance To Osmotic Shock**  
Extended lifetime and very low number of broken beads

### Typical Applications

- Uranium recovery by RIP process

### Standard Packaging

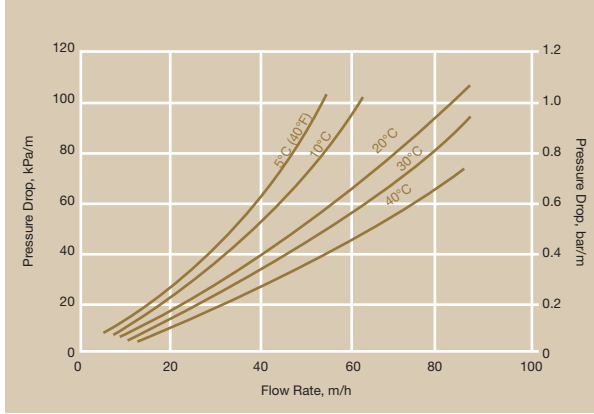
- 25 lit. PE valve bag
- 1000 litre big bag



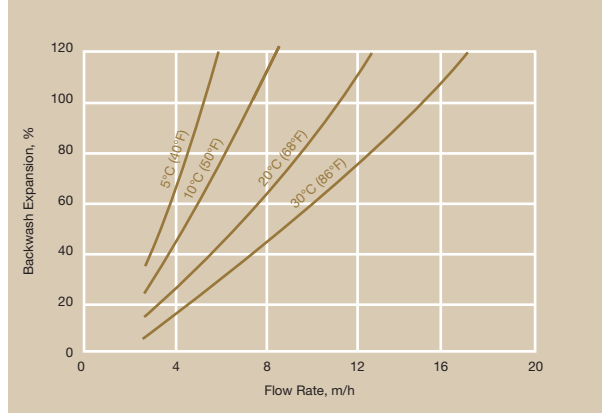
# Resinex™ HM-92-4 UB

Strong base anion exchange resin

## Pressure Drop



## Backwash Expansion



## Standard Regeneration Parameters

## Co-Flow

Concentration	10% NaCl
Level	170-530 g/l
Flow rate regenerant	4-6 BV/h
Contact time regenerant	30-60 min.
Flow rate slow rinse	4-6 BV/h
Slow rinse water required	2-4 BV
Flow rate fast rinse	10-30 BV/h
Fast rinse water required	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.

## Product Packing



25 lit. polyethylene valve bag  
48 bags per pallet



Polypropylene FIBCs  
(big bag), 1.000 lit.



**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.



**NOTICE** Due to the progressive nature of the Jacobi Carbons Group and the continually improving design and performance of our products, we reserve the right to change product specifications without prior notification. The information contained in this datasheet is intended to assist a customer in the evaluation and selection of products supplied by Jacobi Carbons. The customer is responsible for determining whether products and the information contained in this document are appropriate for customer's use. Jacobi Carbons assumes no obligation or liability for the usage of the information in this datasheet, no guarantees or warranties, expressed or implied, are provided. Jacobi Carbons disclaims responsibility and the user must accept full responsibility for performance of systems based on this data.

© Copyright 2014 Jacobi Carbons, Resinex, the Resinex and the Jacobi logos are trademarks of Jacobi Carbons, all of which may or may not be used in certain jurisdictions.

RXHM92\_4\_UB\_e\_Rev10\_20140327

**LENNTECH**

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



**JACOBI**  
THE CARBON COMPANY