

# Resinex™ HM-P92-BG-SO<sub>4</sub>

## Strong base anion exchange resin

Resinex™ HM-P92-BG-SO<sub>4</sub> 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™ HM-P92-BG-SO<sub>4</sub> is especially adapted for the Uranium extraction process (e.g. Resin-In-Pulp process)

### Typical Properties

Type	Crosslinked polystyrene divinylbenzene
Form	macroporous, milky white, spherical beads
Functional group	Quaternary amine, Type 1
Whole bead count	95% min.
Ionic form, as shipped	SO <sub>4</sub> <sup>-</sup>
Bead size	0.70 - 1.25 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> → SO <sub>4</sub> <sup>-</sup>	8% max.
Stability, temperature	60°C max.
Stability, pH	0 - 14

### Standard Design Conditions

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

### 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

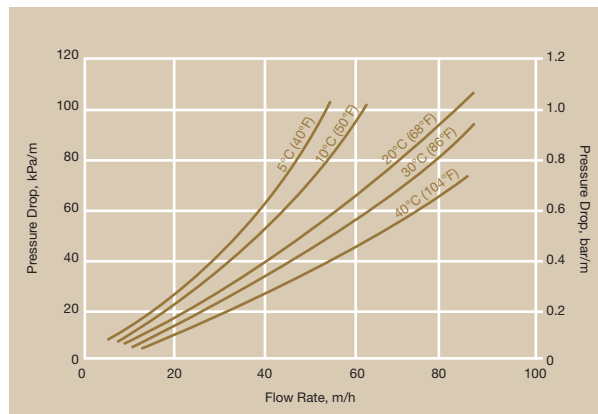
### Standard Packaging

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

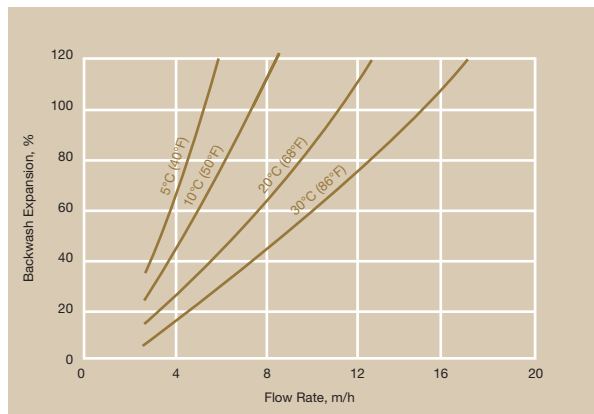
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### Pressure Drop



### 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.

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## LENNTECH

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



**JACOBI**  
THE CARBON COMPANY