DOWEX UPCORE Mono A-625

A Uniform Particle Size, Strong Base Anion Exchange Resin Specifically Designed for Layered Anion Beds in the UPCORE System

Product	Type	Matrix	Functional group
DOWEX* UPCORE* Mono A-625	Type 1 strong base anion	Styrene-DVB, gel	Quaternary amine

Guaranteed Sales Specifications		Cl^- form
Total exchange capacity, min.	eq/l	1.3
	kgr/ft³ as $CaCO_3$	28.4
Water content	%	47 - 54
Bead size distribution†		
Mean particle size	μm	670 ± 50
Uniformity coefficient, max.		1.1
>850 μ, max.	%	5
<300 μ, max.	%	0.5
Whole uncracked beads, min.	%	95

Typical Physical and Chemical Properties		Cl^- form
Total swelling ($Cl^- \rightarrow OH^-$)	%	20
Particle density	g/ml	1.09
Shipping weight	g/l	670
	lbs/ft³	42

Recommended Operating Conditions

- Maximum operating temperature:
  - OH^- form: 60°C (140°F)
  - Cl^- form: 100°C (212°F)
- pH range: 0 - 14
- Bed depth, min.: 800 mm (2.6 ft)
- Pressure drop, design max.: 1.5 bar (22 psi)
- Pressure drop, max.: 2.5 bar (37 psi)
- Flow rates:
  - Service/fast rinse: 5-60 m/h (2-24 gpm/ft²)
  - Regeneration/displacement rinse: 4-10 m/h (1.6-4 gpm /ft²)
- Total rinse requirement: 2 - 4 Bed volumes
- Regenerant: 2-5% NaOH

† For additional particle size information, please refer to Particle Size Distribution Cross Reference Chart (Form No. 177-01775).

Typical properties and applications

DOWEX UPCORE Mono A-625 strong base anion resin is a uniform particle size, gellular, type I anion resin designed for use in the UPCORE counter-current regeneration packed bed system. The particle size is specially selected to maintain excellent separation in layered beds when used with DOWEX UPCORE Mono WB-500 weak base anion resin.

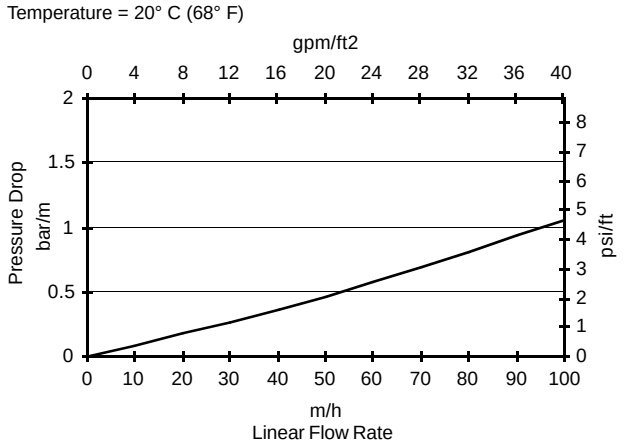
The absence of large beads in DOWEX UPCORE Mono A-625 resin results in high operating capacity and good resistance to silica fouling.

DOWEX UPCORE Mono A-625 resin has an excellent resistance to mechanical and osmotic stress which helps minimize resin attrition.

Packaging

25 liter bags or 5 cubic feet fiber drums

Figure 1. Pressure Drop Data



For other temperatures use:

$P_T = P_{20°C} / (0.026\ T_{°C} + 0.48)$, where P ≡ bar/m

$P_T = P_{68°F} / (0.014\ T_{°F} + 0.05)$, where P ≡ psi/ft

DOWEX Ion Exchange Resins
For more information about DOWEX resins, call the Dow Liquid Separations business:
North America: 1-800-447-4369
Latin America: (+55) 11-5188-9277
Europe: (+32) 3-450-2240
Japan: (+81) 3-5460-2100
Australia: (+61) 3-9226-3545
http://www.dowex.com

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