



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 I strong base anion	Styrene-DVB, gel	Quaternary amine

Guaranteed Sales Specifications		Cl ⁻ form
Total exchange capacity, min.	eq/L	1.2
	kgr/ft ³ as CaCO ₃	26.2
Water content	%	50 - 56
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.	%	90

Typical Physical and Chemical Properties		Cl ⁻ form
Total swelling (Cl ⁻ → OH ⁻)	%	20
Particle density	g/mL	1.09
Shipping weight**	g/L	705
	lbs/ft ³	44

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).

** As per the backwashed and settled density of the resin, determined by ASTM D-2187.

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.

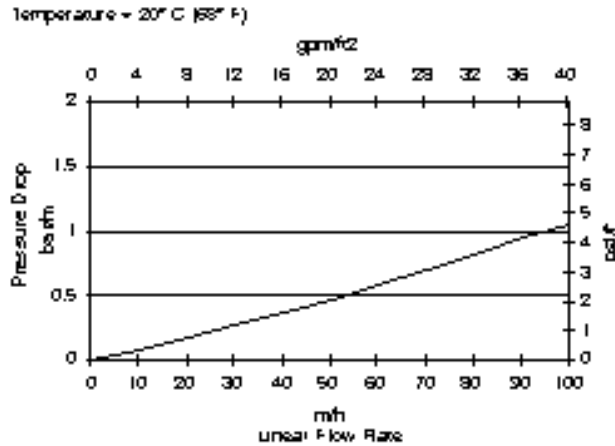
The absence of large beads in DOWEX UPCORE Mono A-625 resin results in high operating capacity and good resistance to silica fouling.

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:

$$P_T = P_{20°C} / (0.028 T_C + 0.48), \text{ where } P \equiv \text{bar/m}$$

$$P_T = P_{68°F} / (0.014 T_F + 0.05), \text{ where } P \equiv \text{psf/ft}$$

DOW™ Ion Exchange Resins
For more information about DOW™ resins, call the Dow Water & Process Solutions business:

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Warning: Oxidizing agents such as nitric acid attack organic ion exchange resins under certain conditions. This could lead to anything from slight resin degradation to a violent exothermic reaction (explosion). Before using strong oxidizing agents, consult sources knowledgeable in handling such materials.

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