



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/ft ³ 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 ⁻ → OH ⁻)	%	20
Particle density	g/ml	1.09
Shipping weight	g/l	670
	lbs/ft ³	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.

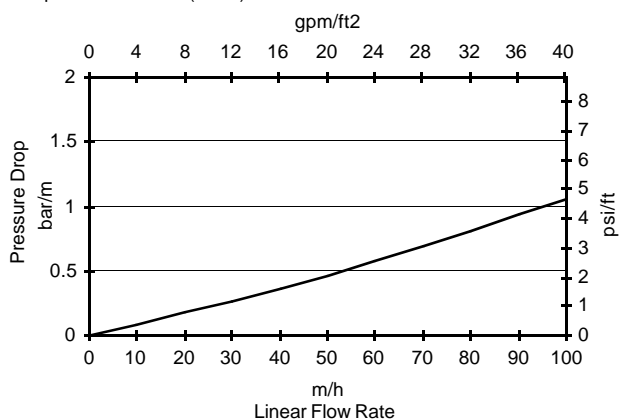
DOWEX UPCORE Mono A-625 resin has an excellent resistance to mechanical and osmotic stress which helps minimize resin attrition.

Packaging

25 liter bags or 5 cubic feet fiber drums

Figure 1. Pressure Drop Data

Temperature = 20° C (68° F)



For other temperatures use:

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

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

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>

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.

Notice: No freedom from any patent owned by Seller or others is to be inferred. Because use conditions and applicable laws may differ from one location to another and may change with time, Customer is responsible for determining whether products and the information in this document are appropriate for Customer's use and for ensuring that Customer's workplace and disposal practices are in compliance with applicable laws and other governmental enactments. Seller assumes no obligation or liability for the information in this document. NO WARRANTIES ARE GIVEN; ALL IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE ARE EXPRESSLY EXCLUDED.

