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**DOWEX™ UPCORE™ Mono MA-600**  
 Uniform Particle Size, Macroporous, Strong Base Anion Exchange Resin

Product	Type	Matrix	Functional group
DOWEX™ UPCORE™ Mono MA-600	Type 1 strong base	Styrene-DVB, macroporous	Quaternary amine

Guaranteed Sales Specifications		Cl <sup>-</sup> form
Total exchange capacity, min.	eq/L kgr/ft <sup>3</sup> as CaCO <sub>3</sub>	1.1 24.0
Water content	%	55 - 65
Bead size distribution <sup>†</sup>		
Mean particle size	µm	640 ± 50
Uniformity coefficient, max.		1.1
> 850 µm, max.	%	5
< 300 µm, max.	%	0.5
Whole beads, min.	%	95

Typical Physical and Chemical Properties		Cl <sup>-</sup> form
Total swelling (Cl <sup>-</sup> → OH <sup>-</sup> )	%	15
Particle density	g/mL	1.06
Shipping weight**	g/L lbs/ft <sup>3</sup>	670 42

Recommended Operating Conditions	• Maximum operating temperature:	
	OH <sup>-</sup> form	60°C (140°F)
	Cl <sup>-</sup> form	100°C (212°F)
	• pH range	0-14
	• Bed depth, min.	1,500 mm (4 ft)
	• Pressure drop, design max.	1.5 bar (22 psi)
	• Pressure drop, max.	2.5 bar (37 psi)
	• Flow rates:	
	Service/fast rinse	5-50 m/h (2-20 gpm/ft <sup>2</sup> )
	Regeneration/displacement rinse	6-12 m/h (2.4-4.8 gpm/ft <sup>2</sup> )
• Total rinse requirement	2 - 4 Bed volumes	
• Regenerant	2-4% NaOH	

<sup>†</sup> 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.

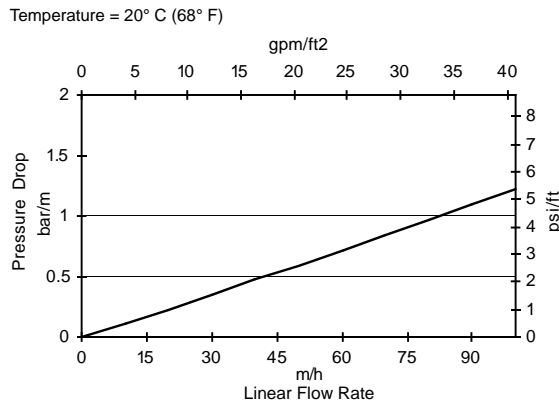
## Typical Properties and Applications

DOWEX™ UPCORE™ Mono MA-600 uniform particle size macroporous strong base anion resin is designed for use in a packed bed counter-current regeneration system. The particle size is specially selected to give a high degree of compaction prior to regeneration and to minimize pressure drop across the bed. The macroporous structure of this resin makes it the resin of choice in treating waters with high level of organic matter if operating capacity is not of high concern.

## Packaging

25 liter bags or 5 cubic feet fiber drums

Figure 1. Pressure Drop Data



### 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 Water 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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