



DOWEX MONOSPHERE 545C NG (H)

A Uniform Particle Size Strong Acid Cation Exchange Resin for Steam Generator Blowdown, Reactor Water Clean-up and Other Nuclear Water Applications

Product	Type	Matrix	Functional group
DOWEX* MONOSPHERE* 545C NG (H)	Strong Acid Cation	Styrene-DVB gel	Sulfonic Acid

Guaranteed Sales Specifications									H ⁺ form
Total exchange capacity, min.					eq/L				2.5
Water content					%				36-42
Bead size distribution									
Mean particle size					μm				525 ± 50
Uniformity coefficient, max.									1.1
>800μm, max.					%				3
<300μm, max.					%				1
Whole uncracked beads, min.					%				95
Crush strength									
Average, min					g/bead				500
>200 g/bead					%				95
Ionic conversion, min.					%				99.7
Trace metals, ppm dry resin, max.									
Na	Fe	Cu	Al	Co	Pb	Hg	Mg	Ca	Heavy metals (as Pb)
50	50	10	50	30	10	10	50	50	10

Typical Physical and Chemical Properties									H ⁺ form
Shipping weight					g/L				820
					lbs/ft ³				51
Particle Density					g/mL				1.27

Recommended Operating Conditions	• Maximum operating temperature	130°C (265°F)
	• pH range (optimum)	0-14
	• Bed depth, min.	450 mm (1.5 ft)

Typical Properties and Applications

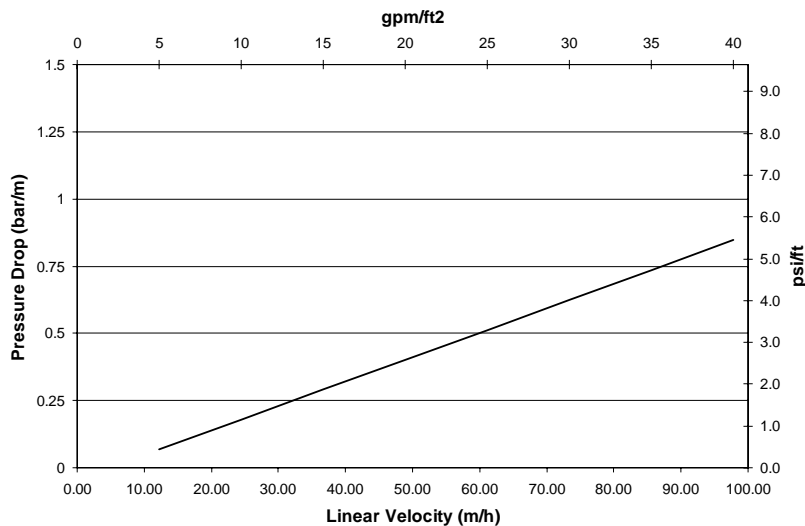
DOWEX MONOSHPHERE 545C NG (H) is a high Capacity, uniform particle size gel cation exchange resin with outstanding purity and performance.

DOWEX MONOSHERE 545C NG (H) can be used as a single resin or in mixed beds together with DOWEX SBR LC NG (OH) anion exchange resin or DOWEX MONSPHERE 550A (OH).

Packaging

5 cubic foot fiber drums.

Figure 1. Pressure Drop DOWEX MONOSPHERE 545C (H), 20°C (68°F)



For other temperatures use:

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

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) 11-5188-9222
 Europe: (+32) 3-450-2240
 Pacific (ex. China): +800-7776-7776
 China: +10-800-600-0015
<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.

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