

Product

Product Information

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Functional group

DOWEX™ PSR-2

A Strong Base Anion Exchange Resin Designed for the Selective Removal of Trace Contaminants from Potable Water

Type

Guaranteed Sales Specifications Cl· form Total exchange capacity, min. eq/L kgr/ft³ as CaCO₃ 14.2 Water content % 40.0 - 47.5 Bead size distribution: % % on 16 mesh, max. % % through 40 mesh, max. % Whole uncracked beads, min. % Crush strength (>200 g/bead, min.) % 90 90 Typical Physical and Chemical Properties Cl· form Particle density g/L 670 Shipping weight** g/L 670 Ibs/ft³ 42 Recommended Operating Conditions • Maximum operating temperature 60°C (140°F) Operating Conditions • pH range 0 - 14 • Service flow rate 0.5 - 12 gpm/ft² • Service linear velocity 1.0 - 22 gpm/ft² • Bed depth, min.: Single bed 800 mm (2.6 ft)	Product	туре	IVIALITX	runctional group
Total exchange capacity, min. eq/L kgr/ft³ as CaCO₃ 14.2	DOWEX™ PSR-2	Tri-n-butyl amine	Styrene-DVB, gel	Quatenary amine
Recommended Maximum operating temperature Maximum operat	Guaranteed Sales Specifications			CI ⁻ form
Water content % 40.0 - 47.5 Bead size distribution: % 3 % on 16 mesh, max. % 5 Whole uncracked beads, min. % 5 Whole uncracked beads, min. % 95 Crush strength (>200 g/bead, min.) % 90 Typical Physical and Chemical Properties CI form Particle density g/mL 1.10 Shipping weight** g/L 670 Ibs/ft³ 42 Recommended • Maximum operating temperature 60°C (140°F) Operating • pH range 0 - 14 • Service flow rate 0.5 - 12 gpm/ft³ • Service linear velocity 1.0 - 22 gpm/ft² • Bed depth, min.: Bed depth, min.:	Total exchange capacity, min.		•	
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Typical Physical and Chemical Properties Particle density Shipping weight** Particle density Shipping weight** Particle density Shipping weight** Particle density Shipping weight** Shipping weight** Particle density Shipping weight** Shipping weight** Service linear velocity Shipping weight** Particle density Shipping weight** Shipping weight*	Whole uncracked beads, min.		%	95
Particle density Shipping weight** Particle density Shipping weight** g/L bs/ft³ 670 bs/ft³ 42 Recommended Operating Conditions PH range Service flow rate Service linear velocity Bed depth, min.:	Crush strength (>200 g/bead, min.)		%	90
Recommended Operating Conditions • Maximum operating temperature • pH range • Description of the service flow rate • Service flow rate • Service linear velocity • Bed depth, min.:	<u> </u>		g/L	670
 pH range Service flow rate Service linear velocity Bed depth, min.: 		Maximum operating te		
 Service linear velocity Bed depth, min.: 		• pH range		0 - 14
Bed depth, min.:		 Service flow rate 		0.5 - 12 gpm/ft ³
		Service linear velocity		1.0 - 22 gpm/ft ²
				800 mm (2.6 ft)

Matrix

[†] 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™ PSR-2 is a gellular strong base anion resin supplied in the Cl- form. It is designed to offer the highest selectivity for trace contaminants such as nitrate and perchlorate, while it's gellular structure also achieves high total exchange capacity.

Applications include:

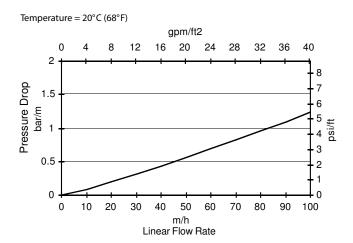
- Perchlorate retention and removal
- Gold recovery

This product has been certified under ANSI Standard 61.

Packaging

5 cubic feet fiber drums

Figure 1. Pressure Drop Data



For other temperatures use:

 $P_{T}=P_{20\%} \ / (0.026\, T_{\%} \ + 0.48), where P \ ? bar/m \\ P_{T}=P_{68\%} \ / (0.014\, T_{\%} \ + 0.05), where P \ ? psi/ft$

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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