DOWEX™ PSR-2

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

Product	Type	Matrix	Functional group
DOWEX™ PSR-2	Tri-n-butyl amine	Styrene-DVB, gel	Quatenary amine

Guaranteed Sales Specifications		Cl^- form
Total exchange capacity, min.	eq/L	0.65
	kgr/ft³ as $CaCO_3$	14.2
Water content	%	40.0 - 47.5
Bead size distribution†		
% on 16 mesh, max.	%	3
% through 40 mesh, max.	%	5
Whole uncracked beads, min.	%	95
Crush strength (>200 g/bead, min.)	%	90

Typical Physical and Chemical Properties		Cl^- form
Particle density	g/mL	1.10
Shipping weight**	g/L	670
	lbs/ft³	42

Recommended Operating Conditions

- Maximum operating temperature: 60°C (140°F)
- pH range: 0 - 14
- Service flow rate: 0.5 - 12 gpm/ft³
- Service linear velocity: 1.0 - 22 gpm/ft²
- Bed depth, min.:
  Single bed: 800 mm (2.6 ft)

† 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:

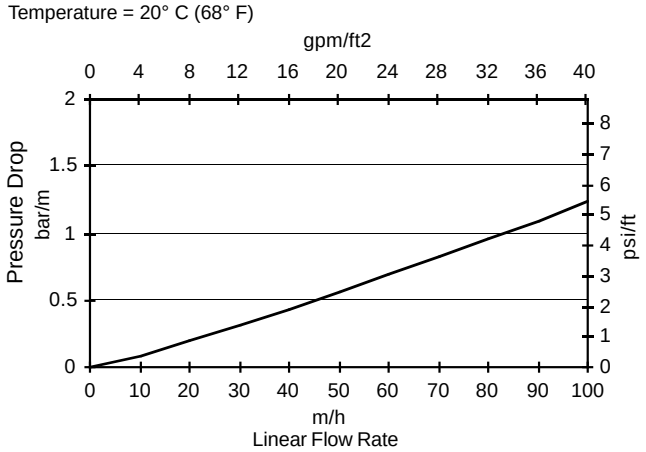
- Perchlorate retention and removal
- Gold recovery

This product has been certified under ANSI Standard 61.

Packaging

5 cubic feet fiber drums

Figure 1. Pressure Drop Data



For other temperatures use:

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

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

DOWEX™ Ion Exchange Resins

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.