

Gel Type Strong Acid Cation Exchange Resin

PFC100H/4460 is a fine mesh gel type strong acid cation exchange resin with excellent resistance to both osmotic and thermal shock. Its special particle sizing permits higher rates of diffusion of most cations including those of heavy metals and amines and also positively charged organics of higher molecular weight, and facilitates their removal on regeneration. These properties of physical robustness, good regenerability, and fast kinetics of exchange make it ideal for a range of applications. In such cases, it is the general rule that a specially graded particle size is required. PFC100H/4460 has a specially tailored particle size for high efficiency make-up water softening, hydrometallurgy, heavy metal removal, sugar treatment, and demineralisation of numerous organic solutions to name but a few.

Basic Features:

Application	Demineralization of Water - Uniform Particle Sized Beads
Polymer Structure	Gel polystyrene crosslinked with divinylbenzene
Appearance	Spherical beads
Functional Group	Sulphonic acid
Ionic form as shipped	H ⁺

Typical Physical and Chemical Characteristics:

Total Capacity (min.)	Na ⁺	2 eq/l
Total Capacity (min.)	Na ⁺	43.67 kGr/ft ³
Moisture Retention	H ⁺	51-55 %
Mean Size Typical		0.52-0.62 mm
Uniformity Coefficient (max.)		1.20
Reversible Swelling (max.)	Na ⁺ → H ⁺	8 %
Specific Gravity		1.20 g/ml
Shipping Weight (approx.)		745-770 g/l
Shipping Weight (approx.)		46.6-48.1 lbs/ft ³
Temp Limit	H ⁺	120 °C
Temp Limit	H ⁺	250 °F
Temp Limit	Na ⁺	140 °C
Temp Limit	Na ⁺	285 °F
pH Limits		0-14