



C-150H

Macroporous Strong Acid Cation-Exchange Resin

(FOR USE IN DEMINERALISATION)

Technical Data

PRODUCT DESCRIPTION

Purolite C-150H is a macroporous poly(styrene sulphonate) cation-exchange resin supplied in the hydrogen (regenerated) form designed for the use in demineralisation of water. It has excellent resistance to both osmotic and thermal shock. Its special sponge-like structure 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.

Purolite C-150H is also suitable for many special applications, for hydrometallurgy and for demineralisation of numerous organic solutions to name but a few. Specially tailored particle size gradings are available for certain applications.

CHEMICAL STABILITY

Purolite C-150H is insoluble in acids, alkalis, and all common solvents. However, exposure to significant amounts of free chlorine or other strong oxidising agents over long periods of time will eventually break down the crosslinking. This will tend to increase the moisture content of the resin, decreasing its mechanical strength, and should be avoided

Typical Chemical and Physical Characteristics

Polymer Structure	Macroporous polystyrene crosslinked with divinylbenzene
Appearance	Spherical beads
Functional Group	Sulphonic acid
Ionic Form - as shipped	Hydrogen - H ⁺
Total Capacity (Na ⁺ Form) min	1.8 eq/l min
Moisture Retention (H ⁺ Form)	54 - 59%
Bead Size Range (microns)	+1200 <5 %, -300 <1%
Screen Size Range (U.S. Standard Screen)	16-50 mesh
Reversible Shrinkage (H ⁺ @ Na ⁺)	5%
Specific Gravity (H ⁺ Form)	1.18
Shipping Weight	740 - 775 kg/m ³ (46 - 48.5 lb/ft ³)
Temperature Limit (H ⁺ Form)	120°C (250°F)
(Na ⁺ Form)	140°C (285°F)
pH Limits	None