GENERAL TECHNOLOGIES, SPC

- High-Quality Services & Products

Tel: 816-590-9641, Fax: 253-663-9333
Web: http://gtspc.com, Email: info@gtspc.com

A352Cl

TYPE II MACROPOROUS STRONG BASE ANION EXCHANGE RESIN

(Designed for use in de-ashing and high purity water applications)

Product Description

A352(Cl) resin is a high capacity, macroporous polystyrene Type II strong base anion exchange resin designed for use in deashing and industrial demineralization applications to remove anion impurities from water.

Its macroporous matrix provides physical stability and excellent resistance to osmotic shock. It is also more resistant to organic fouling than gel or porous gel type of strong base anion resins (such as A302).

A352(Cl) resin can also be used in dealkalization and demineralization in high-organic waters, and heavy-metal removal applications.

Typical Physical, Chemical & Operating Characteristics

Polymer Structure	Polystyrene cross-linked with Divinylbenzene
Physical Form and Appearance	Tough white spherical beads
Whole Bead Count	90% Min.
Functional Groups	$R\text{-}N^{+}(CH_3)_2(C_2H_4OH)OH^{-}$
Ionic Form (as shipped)	Cl
Shipping Weight, approx.	670 g/l (41 lb./ft.^{3})
Mesh Size (U.S. Std)	16-50
Uniformity Cofficient	1.60
Effective Particle Size	0.40-0.70
Moisture retention, Cl^- form	52-62%
Swelling, Cl^- to OH^-, %	<15%
Total Capacity in Cl^- form	>1.15 meq/ml
pH Range, Stability	0–14

CHEMICAL AND THERMAL STABILITY

A352(Cl) resin is insoluble in dilute or moderately concentrated acids, alkalies, and in all common solvents. However, exposure to significant amounts of free chlorine, “hypochlorite” ions, or other strong oxidizing agents over long periods of time will eventually break down the crosslinking. This will tend to increase the moisture retention of the resin, decreasing it s mechanical strength, as well as generating small amounts of extractable breakdown products. Like all conventional Polystyrene Type II anion resins, it is thermally stable to 77 ^{o}C (170 ^{o}F) in the salt form. The hydroxide form tends to degrade in water temperatures appreciably higher than 35 ^{o}C (95 ^{o}F), thereby losing capacity, as the functional groups are gradually replaced by hydroxyl groups.