PUROLITE

C-115E

Weak Acid Cation Exchange Resin
(FOR PHARMACEUTICAL APPLICATIONS)

Technical Data

PRODUCT DESCRIPTION

Purolite C-115E is a weak acid carboxylic cation exchange resin in the hydrogen form. Its special chemical structure confers exceptional properties in combination with absolute freedom from toxicity. The very weakly acidic carboxylic groups (pK_a=5.5-6.0) make it ideal for the uptake of many complex bases. This can help in their separation and purification. **Purolite C-115E** is delivered in a water swollen state specially treated to remove extractibles. These properties make it ideal for pharmaceutical and potable applications, when used in accordance with FDA recommended procedures for this type of product.

Among the applications for which **Purolite C-115E** has been considered are treatment of amino acids, enzymes, hormones, milk, milk by products, alkaloids, viruses, antibiotics (streptomycin, penicillin), fermentation products, sugar solutions and citrus derivatives.

Typical Chemical and Physical Characteristics

Polymer Structure	**Polyacrylic crosslinked with divinylbenzene**
Appearance	**Spherical beads**
Functional Group	**Carboxylic acid - $R\text{-}COO^-$**
Ionic Form - as shipped	**Hydrogen - H^+**
Total Capacity (H^+ Form) min.	**3.6 eq/l**
Moisture Retention (H^+ Form)	**46-53%**
Bead Size Range (microns)	**+1200 <5%. -300 <1%**
(U.S. Standard Screen)	**16-50 mesh**
Reversible Swelling (H^+->Na^+)	**100% max**
(H^+->Ca^{++})	**40% max**
Specific Gravity (H^+ Form)	**1.10**
Shipping Weight	**670-710 kg/m^3 (42-44.5 lb/ft^3)**
Temperature Limit (H^+ Form)	**100°C (212°F)**
pH Limits (Stability)	**0-14**
(Operating)	**6-14**