

GENERAL TECHNOLOGIES, SPC

- High-Quality Services & Products

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C258DQ – Na or H
MACROPOROUS WEAK ACID CATION EXCHANGE RESIN
FOOD GRADE RESIN with SPECIAL PURIFYING TREATMENT
 (Designed for use in water softening, dealkalization, and high-purity water applications)

Product Description

C258DQ resin is a high-capacity, macroporous weak acid cation exchange resin with carboxylic functional groups and acrylic divinylbenzene structure. The product is supplied moist, tough and uniform spherical beads.

C258DQ (H) resin can be used to remove cations associated alkalinity. It is intended for use in hydrogen cycle dealkalization, deionization, and chemical processing application, especially used in the food industry process. C258DQ converts bicarbonate and carbonate alkalinity to CO₂ which can then be easily removed by a decarbonator.

C258DQ (Na, or H) resin can also be used as water softening resins and heavy metal removal (such as lead). In these applications, C258DQ (Na) requires a two stage regeneration with a strong acid first and then with sodium hydroxide. Two stage regeneration is not required for 258DQ(H).

Typical Physical, Chemical & Operating Characteristics	
Polymer Structure	Polyacrylic acid cross linked with Divinylbenzene, macroporous
Physical Form and Appearance	Tough spherical beads
Whole Bead Count	95% min.
Functional Groups	R-COOH
Ionic Form (as shipped)	H+/Na+
Shipping Weight, approx.	H Form: 720 g/l (45 lb/ft ³) Na Form: 760 g/l (57 lb/ft ³)
Mesh Size (U.S. Std.)	16-50
Moisture retention, H+ form	45-55%
Na+ form	53-61%
Swelling	H+→Mg ²⁺ or Ca ²⁺ : Approx. 30% H+→Na+: Approx. 65%
pH Range, Stability	0-14
Total Capacity	4.0 meq/ml
Food Grade Purity Specifications	
pH-Value	≤ 2.65
Turbidity	≤3
Microbiology	As required by customers.
Sodium	< 50 mg/100 ml Resin
Ammonium	< 1mg/100 ml Resin
Ammonium (heat treated)	< 6 mg/100 ml Resin
Taste / Odor	No adverse effect on the contact water or the filtrate

CHEMICAL AND THERMAL STABILITY

C258DQ resin is insoluble in dilute or moderately concentrated acids, alkalis, 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 its mechanical strength, as well as generating small amounts of extractable breakdown products. It is hermally stable to higher than 93 °C (200 °F) in the sodium form, and 120 °C (250 °F) in the hydrogen form.



Product has been tested and certified by IAPMO according to NSF/ANSI 44 and NSF/ANSI 61 for material safety requirements only.