

# GENERAL TECHNOLOGIES, SPC

## - High-Quality Services & Products

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### PFOS-891DQ — Cl, STRONG BASE ANION, Cl FORM. (PFOA / PFOS Substance Removal)

#### PRODUCT APPLICATIONS

Polyfluoroalkyl substances, known as PFAS, are manmade chemicals found in everyday items such as non-stick, fast-food wrappers, stain-resistant fabrics, non-stick cookware, firefighting foams, and the manufacturing of certain papers.

PFOS-891DQ is a product designed with high selectivity for perfluoroalkyl substances. The product with various degrees of porosity provides dual removal mechanisms by both ion exchange and adsorption and delivers excellent high operating capacity and kinetics.

Through the treatment operation the resin will effectively remove both the long and short chain PFAS such as PFOA, PFOS

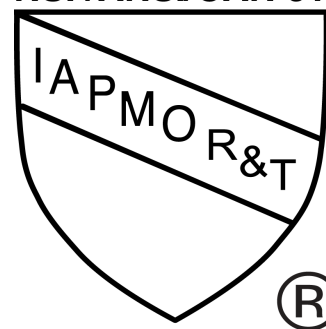
TYPICAL PHYSICAL, CHEMICAL & OPERATING CHARACTERISTICS	
Polymer Structure	Polystyrene cross-linked with Divinylbenzene with various degrees of porosity
Physical Form and Appearance	Tough spherical beads
Ionic Form	Cl
Functional Group	R-N-R <sub>3</sub> <sup>+</sup> X <sup>-</sup>
Moisture Content %	40-58
Total Exchange Capacity Based on Weight meq/g	1.6 – 1.7
Total Exchange Capacity Based on Volume meq/ml	0.5 – 0.6
Shipping Weight, approx. g/l	680 – 750 (Approx. 42 lb/ft. <sup>3</sup> )
Particle Density g/ml	1.03 – 1.09
Mesh Size (U.S. Std)	16 - 50
Particle Size Range %	(0.315 – 1.25mm) ≥ 95.0

#### CHEMICAL AND THERMAL STABILITY

PFOS-891DQ 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 its mechanical strength, as well as generating small amounts of extractable breakdown products. It is thermally stable to higher than 75° C (170° F) in the chloride form.

**NSF/ANSI/CAN 61**



This product is certified by IAPMO R&T against NSF/ANSI 61 for material requirements only.