Aldex C-800 Series • Manufactured in Canada using no chlorinated solvents • Lowest TOC

# C-800 LT UPS Water Softening Resin Sodium Form

Aldex C-800 LT UPS is a **high capacity, high quality, gel-type cation resin** capable of meeting the most exacting requirements of household, farm, commercial, institutional and industrial water softeners. It is supplied in the sodium form as gold colored translucent beads in 1 cubic foot bags and larger bulk packages.

### **Physical Chemical Properties**

Resin Composition: Sulfonated Styrene/

divinylbenzene copolymer

Ionic Form as Shipped: Sodium (Na+)
Physical Form: Golden color,

translucent beads

Moisture Content: 45 to 49.9%

Total Capacity: 1.9 meq/ml minimum 41

kilograins as CaCO3 per

cubic foot

Odor and Taste: None Specific Gravity: 1.28

Net Weight (as shipped): 51 lbs per cubic foot
Particle Size: 20 to 40 mesh - Less than

0.5% through 50 mesh

## **Recommended Operating Conditions**

Influent pH: No restrictions

Maximum Temperature: 250 °F
Bed Depth: Minimum 24"

Normal 36"

Service Flow Rate: 1 to 5 US GPM per

cubic foot

Backwash Flow Rate: See Fig. 2

Regenerant: Sodium Chloride (NaCl) or

Potassium Chloride (KCI)

Regenerant Strength: 5 to 15%, usually 10% Regenerant Flow Rate: 0.3 to 1.0 US GPM per

cubic foot of resin

Regenerant Contact Time: 15 to 60 minutes

Regenerant Dosage Level: 2 to 15 lb per cubic foot

Slow Rinse (Displacement) Flow Rate: 0.3 to 1.0 US GPM per

cubic foot of resin

Slow Rinse Volume: 20 USG per cubic foot resin

Fast Rinse Rate: 1.0 to 5.0 US GPM per

cubic foot resin

Fast Rinse Volume: 30 USG per cubic foot resin

#### C-800 LT UPS Features

#### Very low color, taste or odor

Aldex C-800 LT UPS meets the requirements for paragraph 173.25 of the Food Additive Regulation of the U.S. Food and Drug Administration.

### **High Capacity**

30,000 grains of softening capacity when regenerated with 15 lbs of NaCl per cubic foot and 20,000 grains with 6 lbs of NaCl per cubic foot ensuring high efficiency and low operating costs.

#### **Long Life**

Strong and durable beads insure long service life.

#### Reliability

Aldex Chemical has over 34 years of field usage by thousands of customers demonstrate the reliability of Aldex ion exchange resins, zeolites and other water treatment media.

## Safety Information

A material safety data sheet is available for Aldex C-800 LT UPS. Copies can be obtained from Aldex Chemical Co., LTD. Aldex C-800 LT UPS is not a hazardous product and is not WHMIS controlled.

Caution: Acidic and basic regenerant solutions are corrosive and should be handled in a manner that will prevent eye and skin contact. Before using strong oxidizing agents in contact with ion exchange resin, consult sources knowledgeable in the handling of these materials.



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## C-800 LT UPS Operating Suggestions

#### Iron

Aldex C-800 LT UPS will remove most of the dissolved iron, can filter much of the suspended iron and may or may not remove organically bound iron from water. When softeners are used to remove iron from the water, periodic cleaning of the bed mechanically or with a chemical iron cleaner may be necessary.

#### **Chlorine**

All cation exchange resins are affected by chlorine and suffer degradation and swelling. Is its recommended that the chlorine in the water be maintained below 1.0 ppm when using Aldex C-800 LT UPS.

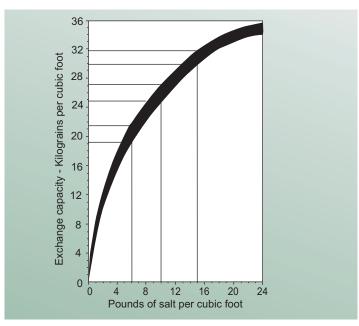


Fig. 1 Exchange capacity vs. regeneration level Sodium form C-800 LT UPS

Cation Resin

### **Backwash Characteristics**

Aldex C-800 LT UPS should be backwashed for at least 10 minutes after each service cycle in a conventionally down flow regenerated softener. To reclassify the beads and remove suspended solids from the top of the bed, the resin bed should be expanded at least 50% according to Fig. 2.

In the case of non-conventional or upflow regenerated softeners, it may not be necessary to follow the above procedure since the backwash and brine injection are incorporated in the same step.

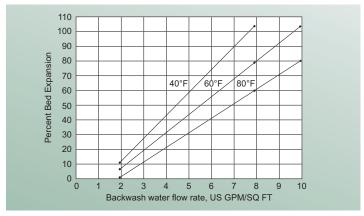


Fig. 2 Bed expansion vs. backwash flow rate for various water temperatures

