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

C-800F Fine Mesh Water Softening Resin Sodium Form

NSF/ANSI 61 and NSF/ANSI 44 Certified. *Aldex C-800F is a* ***high quality, gel-type, high capacity fine mesh cation resin*** *for use in most domestic and industrial water softening applications. Aldex C-800F resin has far more surface area per square foot than typical water softening resin. The result is faster kinetics and more ion exchange capacity per regeneration, using similar amounts of salt.*

Physical Chemical Properties

Resin Composition:	Sulfonated styrene / divinylbenzene copolymer
Ionic Form as Shipped:	Sodium (Na+)
Physical Form:	Dark amber color, translucent beads
Particle Size Distribution:	30-70 mesh
+30 mesh	2% maximum
-70 mesh	2% maximum
Moisture Content:	45 to 49.9%
Total Capacity:	2.0 meq/ml 43 kilograins as $CaCO_3$ per cubic foot
Odor and Taste:	None
Specific Gravity:	1.29
Net Weight (as shipped):	51 lbs per cubic foot

Recommended Operating Conditions

Influent pH:	No restrictions
Influent Free Chlorine:	<1.0 ppm Cl_2
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 (KCl)
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 of regenerant 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:	Usually 30 USG per cubic foot resin

C-800F Features

No Chlorinated Solvents

The absence of chlorinated solvents in the manufacturing of Aldex C-800F results in very low TOC leakage.

Very low color, taste or odor

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

Reliability

Over 34 years of actual field usage by thousands of customers demonstrates the reliability of Aldex C-800F.

Advantages of Fine Mesh Resin

- Highest capacity / long service cycles
- Minimum salt usage
- Low backwash rates
- Shorter regeneration times
- Reduced rinse water
- Increased removal of ferrous iron

Safety Information

A material safety data sheet is available for Aldex C-800F. Copies can be obtained from Aldex Chemical Co., LTD. Aldex C-800F 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.

Tested and Certified by WQA according to NSF/ANSI standards 44 and 61 for materials safety only.

Since 1976

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C-800F Operating Suggestions

Iron

In most cases Aldex C-800F will remove more iron from water than the Aldex C-800.

Hardness Leakage

At normal service flow rates, Aldex C-800F will have less hardness leakage than Aldex C-800, however, the hardness leakage will be greater at the higher flow rates, especially those encountered in some dishwashing applications.

Pressure Drop Considerations

The pressure drop across a bed of Aldex C-800F will be from 2.5 to 4.0 times what it would be for Aldex C800 for any given conditions of flow rate and temperature. Insure the underdrain system can accommodate this increase in pressure drop or modify accordingly.

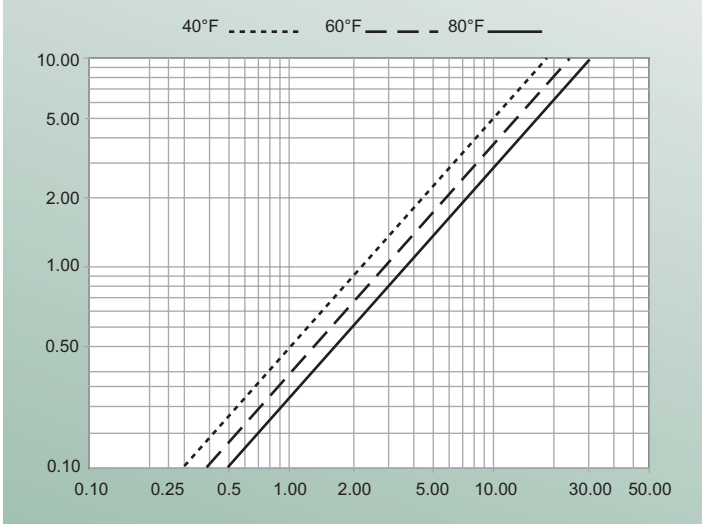

Fig. 1 Pressure Drop vs Flow Rate at various degrees Fahrenheit (F°)

Capacity Expectations

Several factors can influence the operating or working capacity of Aldex C-800F find mesh resin, therefore, it is not possible in this bulletin to predict exactly what the operating capacity of Aldex C-800F will be. Factors which influence capacity include: cocurrent vs countercurrent regeneration, high service flow rates vs low flow rates, regeneration and salt dosage. Generally speaking the operating capacity of Aldex C-800F will be approximately 10% higher than standard mesh softener resin in most applications when both are used under the same conditions.

Backwash Characteristics

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 by backwashing for at least five minutes or until the backwash water is clear. The above may not be necessary in the case of upload regenerated softeners since the backwash and brine injection are incorporated in the same step.

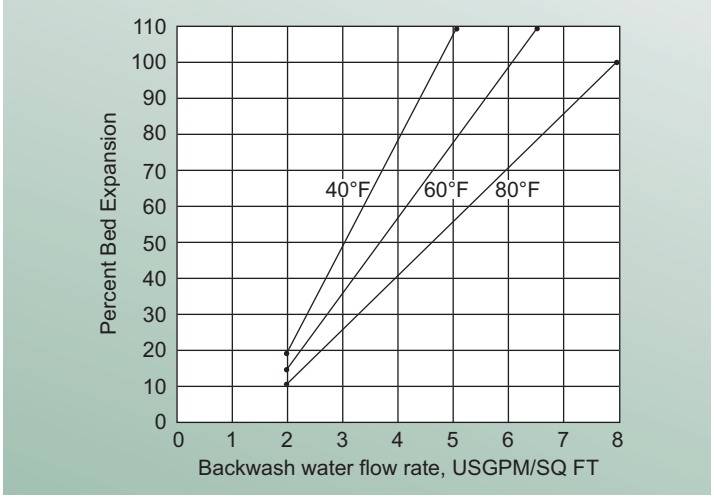

Fig. 2 Bed Expansion vs. Backwash Flow Rate at various degrees Fahrenheit (F°)

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