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

C-800 UPS Water Softening Resin Sodium Form

Tested and certified by WQA according to NSF/ANSI/CAN 61 and 372, NSF/ANSI 44 and CSA B483.1. *Aldex C-800 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 black colored beads in 25 litre bags and larger bulk packages.*

Physical Chemical Properties

Resin Composition:	Sulfonated styrene / divinylbenzene copolymer
Ionic Form as Shipped:	Sodium (Na+)
Physical Form:	Black colored beads
Moisture Content:	45 to 49.9%
Total Capacity:	1.9 meq/ml minimum 41 kilograins as $CaCO_3$ per cubic foot
Odor and Taste:	None
Specific Gravity:	1.28
Net Weight (as shipped):	780 to 820 g/l
Particle Size:	400 to 800 µ (90%) <0.5% through 300 µ

Recommended Operating Conditions

Influent pH:	No restrictions
Maximum Temperature:	150 °C
Bed Depth:	Minimum 60 cm Normal 90 cm
Service Flow Rate:	8 to 40 BV/h
Backwash Flow Rate:	See Fig. 2
Regenerant:	Sodium Chloride (NaCl) or Potassium Chloride (KCl)
Regenerant Strength:	5 to 15%, usually 10%
Regenerant Flow Rate:	3 to 8 BV/h
Regenerant Contact Time:	15 to 60 minutes
Regenerant Dosage Level:	30 to 240 g/l
Slow Rinse (Displacement) Flow Rate:	3 to 8 BV/h
Slow Rinse Volume:	2 to 4 BV
Fast Rinse Rate:	8 to 40 BV/h
Fast Rinse Volume:	4 to 8 BV

C-800 UPS Features

No Chlorinated Solvents

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

Very low color, taste or odor

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

High Capacity

1.4 eq/l grains of softening capacity when regenerated with 240 g/l of NaCl and 1.0 eq/l grains with 96 g/l of NaCl ensuring high efficiency and low operating costs.

Long Life

Strong and durable beads ensure long service life.

Reliability

Aldex Chemical has over 40 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 UPS. Copies can be obtained from Aldex Chemical Co., LTD. Aldex C-800 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.

Tested and certified by WQA according to NSF/ANSI/CAN 61 and 372, NSF/ANSI 44 and CSA B483.1 for materials safety only. For use restrictions, please visit www.wqa.org.

Since 1976

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C-800 UPS Operating Suggestions

Iron

Aldex C-800 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.

**The removal of iron was not evaluated in the WQA certification.*

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 UPS.

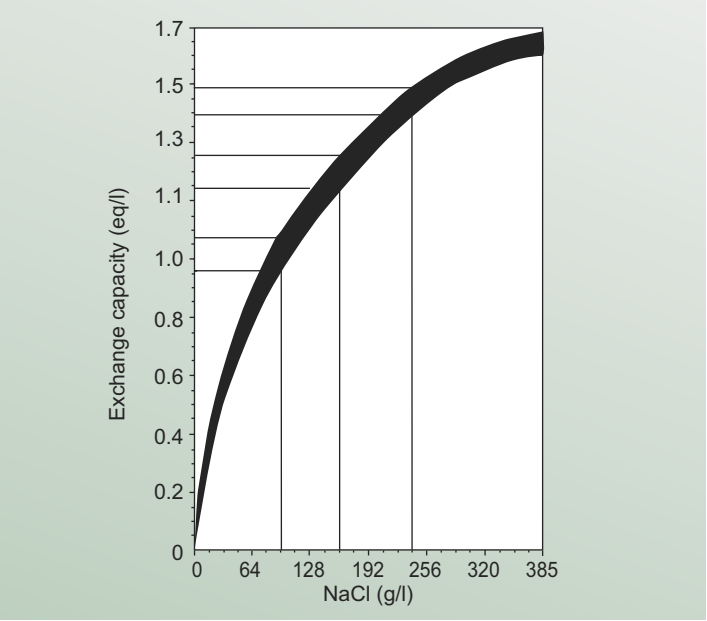

Fig. 1 Exchange capacity vs. regeneration level Sodium form C-800 UPS Cation Resin

Backwash Characteristics

Aldex C-800 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. For 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.

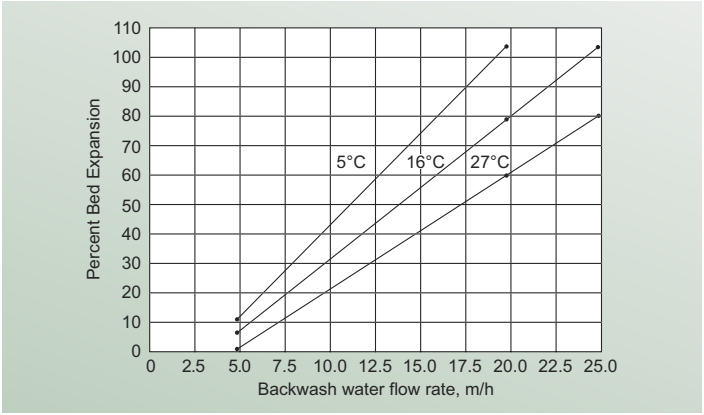

Fig. 2 Bed expansion vs. backwash flow rate for various water temperatures

Pressure Drop

Figure 3 shows the expected pressure loss per foot of bed depth as a function of flow rate at various temperatures.

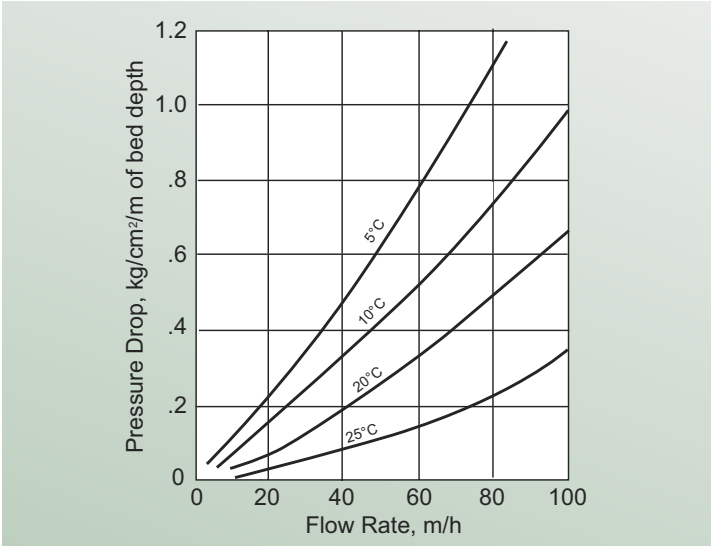

Fig. 3 Pressure Drop vs. Flow Rate

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