Aldex MP Series

C-800H MP UPS

Aldex C800H MP UPS is a premium grade, strongly acidic, uniform particle size (UPS) macroporous cation resin built on a styrene-divinylbenzene matrix. Aldex C800H MP UPS is supplied in the hydrogen form and has been specifically designed to provide high capacity, low rinse requirements and long life when purifying highly viscous streams with a high solids content.

Physical Chemical Properties

Resin Composition: Macroporous polystyrene

crosslinked with divinylbenzene

Ionic Form as Shipped: Hydrogen (H+) Physical Form:

Spherical particles

Moisture Content

Na+ Form: 48 to 53% H+ Form: 50 to 56%

Total Capacity

Na+ Form: 2.0 eg/l H+ Form: 1.8 eq/l Odor and Taste: None

Net Weight (as shipped): 50 lbs per cubic foot

Particle Size: 20 to 40 mesh

Uniform Coefficient 1.30

Recommended Operating Conditions

Influent pH: 0 to 14 300 °F Maximum Temperature:

Bed Depth: Minimum 36"

Service Flow Rate: 1 to 5 US gpm/ft3 (8 to 40 BV/h)

See Fig. 2

Backwash Flow Rate:

Regenerant: Hydrochloric Acid (HCI)

Regenerant Strength:

Regenerant Flow Rate: 0.30 to 0.9 US gpm/ft3

(2 to 7 BV/h)

Regenerant Dosage Level: See Fig. 3

Slow Rinse (Displacement) Flow Rate: 0.30 to 0.9 US gpm/ft3

(2 to 7 BV/h)

Fast Rinse (Displacement) Flow Rate: 1 to 5 US gpm/ft3

(8 to 40 BV/h)

25 to 75 US GPM per Rinse Water Requirements:

cubic foot

Exchange Capacity: See Fig. 3 5% maximum Reversible Swelling Na⁺ to H⁺

C-800H MP UPS Features

Macroporous Structure

The macroporous structure of Aldex C-800H MP UPS make it possible to incorporate a higher level of divinylbenzene into the copolymer matrix than is possible with standard gel type resins. This results in a resin which has greater stability when exposed to oxidizing conditions such as high temperatures, iron and the presences of oxidizing agents.

High Physical Stability

The macroporous structure with high divinylbenzene content and uniform particle size provides greater resistance to bead breakage.

Low Pressure Drop

The uniform particle size of 95%+ in the 20-40 mesh size range gives Aldex C-800H MP UPS a lower pressure drop while maintaining the superior kinetics of standard mesh resin.

Safety Information

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



C-800H MP UPS

Pressure Drop

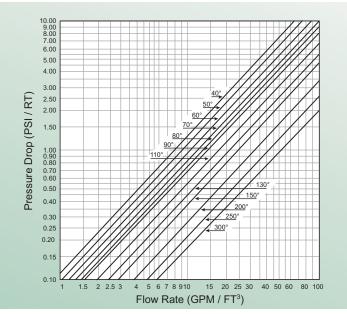


Fig. 1 Pressure Drop vs Flow Rate at various degrees Fahrenheit (F°)

Backwash Characteristics

Aldex C-800H MP UPS should be backwashed for at least 10 minutes at a flow rate sufficient to cause 50% to 75% expansion of the resin bed.

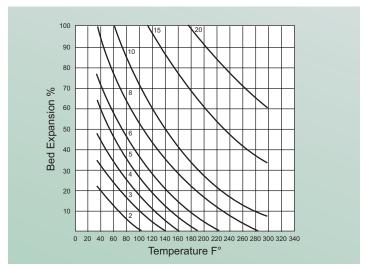


Fig. 2 Hydraulic expansion data parameter flow rate GPM / ${\sf FT}^2$

Capacity Data

Regeneration level lbs HCl per cubic foot	Capacity kgr as CaCo3 per cubic foot	Influent Water
4 6 8 10	20.5 22.0 23.5 24.5	300 ppm ash 50% Sodium 50% Alkalinity

Fig. 3 Capacity Data



Aldex Chemical Company, Ltd. • 630 Laurent Street • Granby QC Canada J2G 8V1 450 372 8844 • Fax 450 372 2566 • info@aldexchemical.com