



AMBERLITE® 200C Na

Strong Acid Cation Exchanger

PRODUCT DATA SHEET

AMBERLITE 200C Na is a premium grade, strong acid, macroreticular, cation exchange resin based on sulfonic acid exchange groups on a polystyrene matrix. Its high degree of crosslinking imparts superior stability to the macroreticular structure of the resin. This gives it far greater resistance to chemical oxidation and higher stability to breakdown from mechanical, thermal or osmotic

shock than any other commercially available cation resin. AMBERLITE 200C Na is recommended for make up demineralization and mixed bed units, hot process softeners, chemical processing, metal treatment applications and systems involving appreciable oxidative potential or high temperatures.

PROPERTIES

Matrix _____	Styrene divinylbenzene copolymer
Functional Groups _____	Sulfonic Acid
Physical Form _____	Beige beads
Ionic Form as shipped _____	Na ⁺
Shipping weight _____	50 lbs/ft ³
Total Exchange Capacity _____	1.7 meq/ml minimum (Na ⁺ form)
Moisture Holding Capacity _____	46 to 52% (Na ⁺ form)
Harmonic mean size _____	060 to 085 mm
Uniformity coefficient _____	1.7 maximum
Screen Grading _____	16 to 45 mesh (US Std Screens)
Screen Analysis _____	5 % maximum on 16 mesh (US Std Screens)
	1 % maximum thru 45 mesh (US Std Screens)
Maximum Reversible Swelling _____	Na ⁺ → H ⁺ : approximately 6%

Test methods are available on request.

SUGGESTED OPERATING CONDITIONS

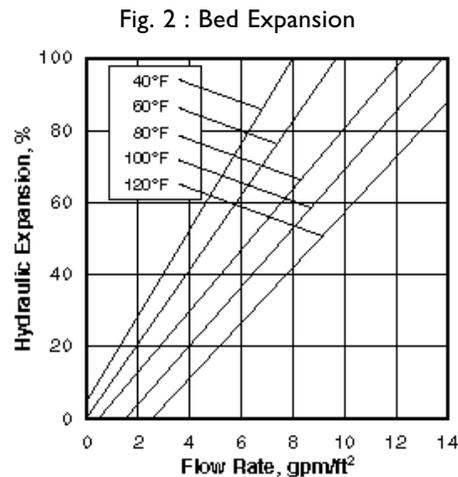
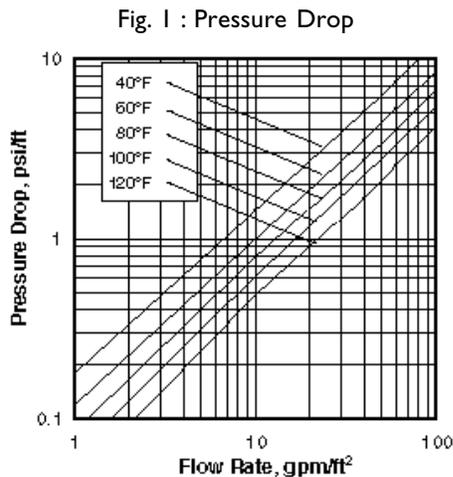
pH Range _____	0 to 14
Maximum Operating Temperature _____	275 °F
Minimum Bed Depth _____	24 inches
Service Flow Rate _____	0.5 to 5 gpm/ft ³
Service Flow Rate (velocity) _____	10 to 50 gpm/ft ²
Regenerants (100 % basis) _____	HCl H₂SO₄ NaCl
Flow rate (gpm/ft ³) _____	0.5 to 1.0 0.5 to 1.0 0.5 to 1.0
Concentration (%) _____	4 to 10 1 to 5 10
Level (lbs/ft ³) _____	2 to 8 4 to 12 4 to 19
Minimum Contact Time _____	30 minutes
Slow Rinse _____	15 gal/ft ³ at regeneration flow rate
Fast Rinse _____	30 to 60 gal/ft ³ at service flow rate

LIMITS OF USE

AMBERLITE 200C Na is suitable for industrial use. For other specific applications such as *pharmaceutical, food processing or potable water applications*, it is recommended that all potential users seek advice from Rohm and Haas Company in order to determine the best resin choice and optimum operating conditions.

HYDRAULIC CHARACTERISTICS

Figure 1 shows the pressure drop data for AMBERLITE 200C Na, as a function of service flow rate and water temperature. Pressure drop data are valid at the start of the service run with clear water and a correctly classified bed. Figure 2 shows the bed expansion of AMBERLITE 200C Na, as a function of backwash flow rate and water temperature.



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Ion exchange resins and polymeric adsorbents, as produced, contain by-products resulting from the manufacturing process. The user must determine the extent to which organic by-products must be removed for any particular use and establish techniques to assure that the appropriate level of purity is achieved for that use. The user must ensure compliance with all prudent safety standards and regulatory requirements governing the application. Except where specifically otherwise stated, Rohm and Haas Company does not recommend its ion exchange resins or polymeric adsorbents, as supplied, as being suitable or appropriately pure for any particular use. Consult your Rohm and Haas technical representative for further information. Acidic and basic regenerant solutions are corrosive and should be handled in a manner that will prevent eye and skin contact. Nitric acid and other strong oxidising agents can cause explosive type reactions when mixed with Ion Exchange resins. Proper design of process equipment to prevent rapid buildup of pressure is necessary if use of an oxidising agent such as nitric acid is contemplated. Before using strong oxidising agents in contact with Ion Exchange Resins, consult sources knowledgeable in the handling of these materials.

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