

PRODUCT DATA SHEET

AMBERLITE™ 200C Na

Industrial Grade Strong Acid Cation Exchanger

AMBERLITE 200C Na resin is a macroreticular strong acid cation exchange resin based on sulfonic acid exchange groups on a polystyrenic 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 shocks than any other commercially available cation resins. AMBERLITE 200C Na resin is recommended for make up demineralisation, hot process softeners, sodium cycle condensate polishers, and other systems involving appreciable oxidative potential or high temperatures.

PROPERTIES

Physical form _____	Grey spherical beads
Matrix _____	Styrene divinylbenzene copolymer
Functional group _____	Sulfonic acid
Ionic form as shipped _____	Na ⁺
Total exchange capacity ^[1] _____	≥ 1.70 eq/L (Na ⁺ form)
Moisture holding capacity ^[1] _____	46 - 52 % (Na ⁺ form)
Shipping weight _____	800 g/L
Particle size	
Uniformity coefficient ^[1] _____	≤ 1.70
Harmonic mean size ^[1] _____	0.600 – 0.850 mm
< 0.355 mm ^[1] _____	1.0 % max
Maximum reversible swelling _____	Na ⁺ → H ⁺ ≤ 6 %

^[1] Contractual value.

Test methods are available on request.

SUGGESTED OPERATING CONDITIONS

Maximum operating temperature _____	135 °C
Service flow rate _____	5 to 40 BV*/h
Regeneration	
Regenerant _____	HCl H ₂ SO ₄ NaCl
Level (g/L) _____	40 to 100 40 to 200 80 to 300
Concentration (%) _____	5 to 8 0.7 to 6 10
Minimum contact time _____	30 minutes
Slow rinse _____	2 BV at regeneration flow rate
Fast rinse _____	2 to 4 BV at service flow rate

* 1 BV (Bed Volume) = 1 m³ solution per m³ resin

HYDRAULIC CHARACTERISTICS

AMBERLITE 200C Na resin gives a pressure drop of about 10 kPa/m bed depth per 10 m/h at 15 °C.

A backwash flow rate of 18 m/h gives a bed expansion of about 65 % at 15 °C.

LIMITS OF USE

AMBERLITE 200C Na resin is suitable for industrial uses. 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 in order to determine the best resin choice and optimum operating conditions.



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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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