



# AMBERLITE® IRA958 Cl

Strong Base Anion Exchanger

## PRODUCT DATA SHEET

AMBERLITE IRA958 Cl is a macroreticular, strongly basic, quaternary ammonium, anion exchange resin in a crosslinked acrylic polymer matrix. The high porosity of its macroreticular structure allows more complete removal of large organic molecules from solution and provides excellent resistance to physical breakdown by attrition and osmotic shock. The acrylic composition of the matrix contributes to excellent desorption of organics during regeneration. AMBERLITE IRA958 Cl is

particularly useful as an organic scavenger for the adsorption of naturally occurring organic matter from surface water. Placed ahead of an ion exchange deionization system, AMBERLITE IRA958 Cl helps prevent organic fouling of the working anion exchange resins of the plant. AMBERLITE IRA958 Cl is also used in sugar juice decolorization to remove color bodies from cane sugar syrups and in purification of various chemical and pharmaceutical products.

### PROPERTIES

Matrix _____	Macroreticular crosslinked acrylic copolymer
Functional Groups _____	Quaternary ammonium
Physical Form _____	White opaque beads
Ionic Form as Shipped _____	Chloride
Total Exchange Capacity _____	0.8 meq/ml minimum (Cl <sup>-</sup> form)
Moisture Holding Capacity _____	66 to 72 % (Cl <sup>-</sup> form)
Shipping Weight _____	45 lbs/ft <sup>3</sup>
Harmonic Mean Size _____	0.63 to 0.85 mm
Uniformity Coefficient _____	1.8 maximum
Screen Grading (wet) _____	16 to 50 mesh (US Std Screens)
Screen Analysis _____	5 % maximum on 16 mesh (US Std Screens) 1 % maximum thru 45 mesh (US Std Screens)

*Test methods are available on request.*

### SUGGESTED OPERATING CONDITIONS

pH Range _____	0 to 14
Maximum Operating Temperature _____	175 °F (Cl <sup>-</sup> form)
Minimum Bed Depth _____	24 inches
Service Flow Rate _____	1 to 5 gpm/ft <sup>3</sup>
<b>Regenerants (100% basis) _____</b>	<b>NaOH + NaCl</b>
Flow Rate (gpm/ft <sup>3</sup> ) _____	0.25 to 0.75      0.25 to 0.75
Concentration (%) _____	2                      10
Level (lbs/ft <sup>3</sup> ) _____	0.4 to 2.5          0.25 to 0.75
Minimum Contact Time _____	30 minutes
Slow Rinse _____	15 gal/ft <sup>3</sup> at regeneration flow rate
Fast Rinse _____	30 to 60 gal/ft <sup>3</sup> at service flow rate

## HYDRAULIC CHARACTERISTICS (Water Treatment)

AMBERLITE IRA958 Cl gives a pressure drop of about 0.58 psi/ft bed depth at a flow rate of 4.1 gpm/ft<sup>2</sup> at 60°F.

A backwash flow rate of 2.5 gpm/ft<sup>2</sup> gives a bed expansion of about 65 % at 60°F.

Pressure drop data are valid at the start of the service run with a clear water and a correctly classified bed.

## LIMITS OF USE

Rohm and Haas manufactures special resins for food processing and potable water applications. As governmental regulations vary from country to country, it is recommended that potential users seek advice from their Rohm and Haas representative in order to determine the best resin choice and optimum operating conditions.

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WEB SITE: <http://www.rohmhaas.com/ionexchange>



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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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