



Tel: +44 (0) 1706 869777
 E-mail: sales@desal.co.uk
 Web: www.desal.co.uk

AMBERLITE™ IRA900 CI

Industrial Grade Strong Base Anion Exchanger

Introduction

AMBERLITE IRA900 CI resin is a macroreticular polystyrene type 1 strong base anion exchange resin containing quaternary ammonium groups. This allows complete removal of all anions, including weakly dissociated ions such as silica. The macroreticular structure combined with the strong basicity permits the removal of large size soluble organic molecules. In addition the macroreticular structure imparts superior resistance to mechanical and osmotic shock.

Properties

Physical form	Tan spherical beads
Matrix	Styrene divinylbenzene copolymer
Functional group	Trimethyl ammonium
Ionic form as shipped	Chloride
Total exchange capacity	≥ 1.00 eq/L (Cl ⁻ form)
Moisture holding capacity	58 to 64 % (Cl ⁻ form)
Shipping weight	700 g/L
Particle size	
Uniformity coefficient	≤ 1.80
Harmonic mean size	0.650 to 0.820 mm < 0.300 mm 0.5 % max
Reversible swelling	Cl ⁻ → OH ⁻ ≤ 25 %

Suggested Operating Conditions

Maximum operating temperature	60 °C
Minimum bed depth	700 mm
Service flow rate	up to 120 BV*/h
Regeneration	
Regenerant	NaOH
Level	50 to 150 g/L
Concentration	2 to 4 %
Minimum contact time	30 minutes
Slow rinse	2 BV at regeneration flow rate
Fast rinse	4 to 8 BV at service flow rate

Applications

Due to its macroreticular structure, AMBERLITE IRA900 CI resin is useful in water treatment applications where organic fouling is a concern for strong base, type 1, resins. AMBERLITE IRA900 CI resin also can be used as an organic scavenger placed in front of a deionization system. Working in the chloride form, it removes the natural organic substances from the raw water, protecting subsequent anion exchange resins from possible irreversible organic fouling.

Performance

The engineering data sheet EDS 0258 A provides information to calculate the operating capacity and silica leakage of AMBERLITE IRA900 CI resin used in water treatment.

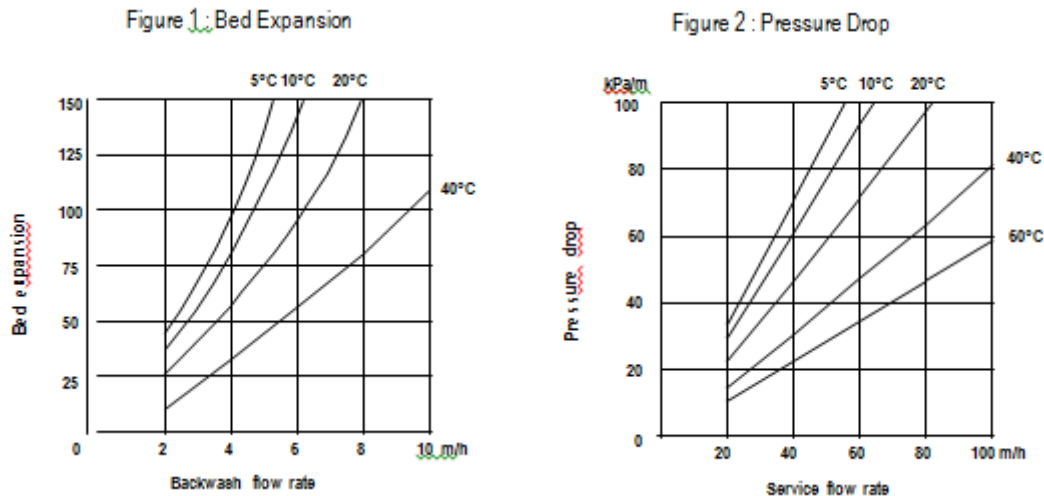
Limits of use

AMBERLITE IRA900 Cl resin is suitable for industrial uses. For all 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.

Hydraulic Characteristics

Figure 1 shows the bed expansion of AMBERLITE IRA900 Cl resin, as a function of backwash flow rate and water temperature.

Figure 2 shows the pressure drop data for AMBERLITE IRA900 Cl resin, 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.



For more information about DOW™ resins, call the Dow Water & Process Solutions business:

North America: 1-800-447-4369
Latin America: (+55) 11-5188-9222
Europe: +800-3-694-6367
Italy: +800-783-825
South Africa: +0800 99 5078
Pacific: +8007776 7776
China: +400 889-0789

<http://www.dowwaterandprocess.com>

Notice: No freedom from infringement of any patent owned by Dow or others is to be inferred. Because use conditions and applicable laws may differ from one location to another and may change with time, Customer is responsible for determining whether products and the information in this document are appropriate for Customer's use and for ensuring that Customer's workplace and disposal practices are in compliance with applicable laws and other governmental enactments. The product shown in this literature may not be available for sale and/or available in all geographies where Dow is represented. The claims made may not have been approved for use in all countries. Dow assumes no obligation or liability for the information in this document. References to "Dow" or the "Company" mean the Dow legal entity selling the products to Customer unless otherwise expressly noted. NO WARRANTIES ARE GIVEN; ALL IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE ARE EXPRESSLY EXCLUDED.

