AMBERLITE® IRA92

Industrial Grade Weak Base Anion Exchanger

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PRODUCT DATA SHEET

AMBERLITE IRA92 is a high capacity polystyrene, weak base anion exchanger. This resin is highly efficient for the uptake of strong acids (e.g. HCl, H_2SO_4) when following a strong acid cation exchanger in the H form. Its macroporous structure ensures excellent adsorption and desorption of organic matter. It has an outstanding mechanical and osmotic stability, making it suitable for the treatment of solution with high ionic concentrations.

PROPERTIES

Matrix	Macroporous polystyrene
Functional groups	$-NR_2$: at least 80 %
Physical form	Ivory-coloured beads
Ionic form as shipped	Free Base (FB)
Total exchange capacity [1]	≥ 1.60 eq/L (FB form)
Moisture holding capacity [1]	40 to 50 % (FB form)
Shipping weight	660 g/L
Specific gravity	1.035 to 1.065 (FB form)
Particle size	
Harmonic mean size	580 to 780 µm
Uniformity coefficient	≤ 1.8
Fines content [1]	< 0.355 mm : 3 % max
Maximum reversible swelling	FB → Cl^- : 25 %
Chemical resistance	Insoluble in dilute solutions of acids or bases and common solvents

[1] *Contractual value*

Test methods available upon request

SUGGESTED OPERATING CONDITIONS

Operating temperature limit	90°C (FB form)		
Service flow rate	5 to 30 BV*/h		
Regenerants	NaOH	NH_3	Na_2CO_3
Level (g/L)	40 to 80	40 to 80	60 to 130
Concentration (%)	2 to 6	2 to 3	5 to 8
Flow rate (BV/h)	2 to 8	2 to 8	2 to 8
Minimum contact time	30 minutes		
Slow rinse	2 BV at regeneration flow rate		
Fast rinse	4 to 8 BV at service flow rate		

** 1 BV (Bed Volume)= 1 m^3 solution per m^3 resin*

APPLICATIONS

The high total capacity of AMBERLITE IRA92 makes it particularly suitable for the removal of strong anions from solutions with relatively high dissolved solids ; its regeneration efficiency is close to the theoretical output. A high operating capacity is obtained from AMBERLITE IRA92 under conditions where a high TDS water is treated at a moderate specific flow rate. The combined adsorption efficiency and physical stability of AMBERLITE IRA92 make it the product of choice for demineralisation of sugar juices.
On account of its outstanding characteristics AMBERLITE IRA92 is used in the following special applications :

- De-acidification of formol,
- Purification of alcaloids,
- Demineralisation of gelatine, lactose, glucose,
- Recovery of chromates from cooling circuits,
- Recycling of rinse water in electroplating workshop.

FOOD PROCESSING

Rohm and Haas manufactures special resins for food processing and drinking water applications. As governmental regulations vary from country to country, it is recommended that potential users contact their Duolite representative to assess the best choice of resin and optimum operating conditions.

All our products are produced in ISO 9002 certified manufacturing facilities.

Rohm and Haas/Ion Exchange Resins - Philadelphia, PA - Tel. (800) RH AMBER - Fax: (215) 409-4534
Rohm and Haas/Ion Exchange Resins - 75579 Paris Cedex 12 - Tel. (33) 1 40 02 50 00 - Fax : 1 43 45 28 19

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