



# IMAC<sup>®</sup> HP336

Weak Acid Cation Exchange Resin

## PRODUCT DATA SHEET

IMAC HP336 is a weak acid cation exchange resin containing carboxylic groups on an acrylic matrix. It is characterised by a high exchange capacity combined with a smaller volume

variation than in the case of conventional carboxylic resins. IMAC HP336 is designed for potable water dealkalisation and treatment of waters used in food industries.

### PROPERTIES

Matrix _____	Polyacrylic
Functional groups _____	-COO <sup>-</sup>
Physical form _____	Opaque beads
Ionic form as shipped _____	H <sup>+</sup>
Total exchange capacity <sup>[1]</sup> _____	≥ 3.90 eq/L (H <sup>+</sup> form)
Moisture holding capacity <sup>[1]</sup> _____	54 to 58% (H <sup>+</sup> form)
Specific gravity _____	1.14 to 1.18 (H <sup>+</sup> form)
Shipping weight _____	700 g/L
Particle size _____	
Uniformity coefficient _____	≤ 1.9
Harmonic mean size _____	550 to 750 µm
Fine contents <sup>[1]</sup> _____	< 0.300 mm : 3.0 % max
Coarse beads _____	> 1.180 mm : 5.0 % max
Maximum reversible swelling _____	H <sup>+</sup> → Na <sup>+</sup> : about 60 %
Chemical resistance _____	Sensitive to oxidants. Max. 0.1 to 0.2 ppm in the inlet water.

<sup>[1]</sup> Contractual value

Test methods available upon request

### SUGGESTED OPERATING CONDITIONS

Minimum bed depth _____	700 mm
Service flow rate _____	5 to 40 BV*/h
Regenerant _____	HCl    H <sub>2</sub> SO <sub>4</sub>
Concentration _____	2 to 5 %    0.5 to 0.8 %
Level _____	110 %
Flow rate _____	2 to 8 BV
Minimum contact time _____	30 minutes
Rinse requirements _____	About 10 BV

\* 1 BV (Bed Volume) = 1 m<sup>3</sup> solution per m<sup>3</sup> resin

## QUALITY CONTROL

All Imac HP resins are manufactured and purified specially for use in non industrial applications. Every batch of IMAC HP336 is analysed to ensure its compliance with high purity specifications, in particular :

- Physical and chemical properties,
- Individual release of certain substances in the treated water,
- Global release of organic substances expressed in TOC (Total Organic Carbon),
- Total microbial count.

## CONDITIONING

IMAC HP336 is ready to use\* : all that is required at the time of commissioning is a 20 bedvolume rinse with the water to be treated.

\* This is valid only if :

1. the resin is stored at a temperature of less than 25°C and protected from UV radiations,
2. the storage time between production date (printed on the bags) and final use does not exceed 6 months.

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

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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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