

PRELIMINARY PRODUCT DATA SHEET

AMBERSEP™ 400 SO₄
Industrial Grade Strong Base Anion Exchanger

AMBERSEP 400 SO₄ is a gel type, strongly basic, type 1 anion exchange resin with superior performance for uranium recovery. Its excellent selectivity for the uranyl sulphate ion over other anions, its high operating capacity, excellent mechanical and physical stability and its resistance to fouling make it the resin of choice. AMBERSEP 400 SO₄ is well suited for recovery of uranium from sulphuric acid

leach systems using fixed beds, in situ leaching, fluidized beds or Resin In Pulp (RIP) applications.

AMBERSEP 400 SO₄ is supplied in the SO₄²⁻ form in order to minimize the presence of Cl⁻ upon start-up. If used in sulphuric acid leach systems, no preconditioning of this resin is required and the resin can be used as supplied.

PROPERTIES

Matrix _____	Polystyrene divinylbenzene copolymer
Functional groups _____	Quaternary ammonium
Physical form _____	Translucent beads
Ionic form as shipped _____	SO ₄ ²⁻
Total exchange capacity ^[1] _____	≥ 1.4 eq/L (SO ₄ ²⁻ form)
Moisture holding capacity ^[1] _____	40 to 47 % (SO ₄ ²⁻ form)
Shipping weight _____	Approx. 730 g/L
Harmonic mean size _____	0.600 - 0.750 mm (0.650 mm)
Uniformity coefficient _____	≤ 1.6
Fine contents ^[1] _____	< 0.500 mm : 1.0 %
Coarse beads _____	> 1.180 mm : 5 %

^[1] Contractual value

Test methods are available on request

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.

All our products are produced in ISO 9001 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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