

## SEPARATION TECHNOLOGIES

### ION EXCHANGE RESINS

# DUOLITE A 161 PLUS

## PRODUCT DATA SHEET



### DESCRIPTION

**DUOLITE A 161 PLUS, is macroporous type 1 strong base Anion Exchange Resin.** Its polystyrene matrix is prepared according to a patented special process which gives a homogeneous structure with flexible bridging obtained through careful crosslinking. The porosity of Duolite A 161 PLUS has been optimised to make it particularly resistant to osmotic shocks and attrition. Performance and stability of Dulite A 161PLUS can be used in continuous ion exchange process and high speed condensate treatment. The physical & chemical properties are tested by the method specified in IS : 7330-1988

### PROPERTIES

Matrix _____	Strene DVB copolymer
Functional groups _____	- N <sup>+</sup> ( CH <sub>3</sub> ) <sub>3</sub> , Min.95% of TEC
Physical form _____	Opaque Beads.
Ionic form as supplied _____	In chloride form
Total exchange capacity _____	M in 1.30 eq / L ( Cl <sup>-</sup> form )
Moisture holding capacity _____	50 -56 % ( Cl <sup>-</sup> form )
Specific gravity _____	About 1.1 ( Cl <sup>-</sup> form )
Shipping weight _____	About 640 to 700 g / L ( Cl <sup>-</sup> form )
Particle size _____	0.3 - 1.2
Maximum reversible swelling _____	Cl <sup>-</sup> ⊕ OH <sup>+</sup> : About 10 to 15 %
Operating pH range _____	0 - 14
Average pore diameter _____	Minimum 250 A°
Chemical stability _____	Insoluble in dilute acids or bases and common solvents.

Please refer our Technical Data Sheet on Duolite storage and handling instructions for storage of resin.

### SUGGESTED OPERATING CONDITIONS

Maximum operating temperature _____	60°C ( OH <sup>-</sup> ), 100°C ( Cl <sup>-</sup> )
Minimum bed depth _____	700 mm
Service flow rate _____	5 to 40 BV* / hr
Maximum linear velocity _____	50 m / hr
Regenerant _____	NaOH
Level _____	30 to 150 g / L
Flow rate _____	2 to 8 BV / hr ( minimum contact time 30 minutes)
Concentration _____	3% to 5%
Slow rinse _____	Min. 2 BV at regeneration flow rate
Fast rinse _____	Same as service flow rate.

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

Please refer the check list provided for safe operation and longer durability of resin.

**AVOID EXCESSIVE ORGANICS ENTERING DUOLITE IER FOR LONG & HEALTHY LIFE**

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For further information please contact your nearest Auchtel representative

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### SAFE HANDLING INFORMATION

A Material Safety Data Sheet is available for each product. To obtain a copy contact your Auchtel representative.

### CAUTION

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 oxidizing 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 oxidizing agent such as nitric acid is contemplated. Before using strong oxidizing agents in contact with Ion Exchange Resins, consult sources knowledgeable in the handling of these materials.

*The suggestions and data in this bulletin are based on information we believe to be reliable. They are offered in good faith, but without guarantee, as conditions and methods of use of our products are beyond our control. We recommend that the prospective user determine the suitability of our materials and suggestions before adopting them on a commercial scale. The Company maintains a policy of continuous development and reserve the right to amend any specification without notice. DUOLITE is a trademark of Rohm and Hass Company, Philadelphia, U.S.A. and Auchtel Products Ltd. are users of the same in India.*

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