

TULSION® MBNR-1154

“PREMIUM GRADE MIXED ION EXCHANGE RESIN FOR TREATMENT OF PRIMERY CIRCUIT WATER IN PWR NUCLEAR POWER OPERATION”

TULSION® MBNR-1154 is a mixture of strongly acidic cation exchange resin in Lithium-7 and a strongly basic anion exchange resin in hydroxide form mixed in capacity equivalent ratio.

TULSION® MBNR-1154 is gel type, nuclear grade mixed bed resin having excellent resistant to oxidizing agents with high operating capacity. It is supplied in moist spherical bead with excellent physical and chemical characteristics. **TULSION® MBNR-1154** is designed to meet nuclear industry specifications.

TULSION® MBNR-1154 is used for remove small radioactive contaminants from the system. It is specially designed to give an optimized balance of pressure drop, exchange kinetics. It is designed to suit the stringent requirement for primary coolant to maintain required pH.



INFLUENT LIMITATION	
Free Chlorine	Not traceable
Turbidity	< 2 NTU
Iron & heavy meta	< 0.1 ppm

TYPICAL CHARACTERISTICS TULSION MBNR-1154		
	TULSION®T-46 ICNR UPS	TULSION®A-333 IANR UPS
Type	Strong Acid Cation Exchange Resin	Strong base anion exchange resin
Volume ratio	1	1.5
Matrix structure	Cross linked polystyrene	Cross linked polystyrene
Functional group	Sulphonic acid	Quaternary Ammonium Type I
Physical form	Amber color moist beads	Moist spherical bead
Ionic form supplied	Lithium	Hydroxide
Uniform coefficient	1.4 max	1.4max
Total exchange capacity	1.75 meq/ml min of 99% in Li form	1.1 meq/ml min of 90% in OH form
Moisture content %	50 ± 3%	62 ± 3%
pH range	0 to 14	0 - 14
Temperature stability	120°C	80°C
Bead strength g/bead	>350	>350
Metals, dry resin (ppm max.)	Na, Mg, Fe, Ca, Al -50, Pb & Cu- 10	Chloride contents: <0.5 % OH conversion: >90%
Backwash settled density	Approx. 700 to 750 gm/liter	

TESTING :

The sampling and testing of ion exchange resins is done as per standard testing procedures, namely ASTM D-2187 and IS-7330, 1998.

PACKING :

Super Sack	1000 lit.	Super Sack	35 cft
MS drums	180 lit.	Fiber Drums	7 cft
HDPE lines Bags	25 lit.	HDPE Lined Bags	1 cft

For Handling, Safety and Storage requirements please refer to the individual Material Safety Data Sheets available at our offices.

The data included herein are based on test information obtained by Thermax Limited. These data are believed to be reliable, but do not imply any warranty or performance guarantee. Tolerances for characteristics are per BIS/ASTM. We recommend that the user should determine the performance of the product by testing on his own processing equipment.

In view of our constant endeavor to improve the quality of our products, we reserve the right to change their specifications without prior notice



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