

# TULSION<sup>®</sup> T-52 Na UPS

## PREMIUM GRADE STRONG ACID CATION EXCHANGE RESIN – SODIUM FORM

Tulsion<sup>®</sup> T-52 Na UPS is a gel type, strong acid cation exchange resin, having excellent resistant to oxidizing agents with high operating capacity.

Tulsion<sup>®</sup> T-52 Na UPS is supplied in moist spherical beads, in hydrogen form, with excellent physical and chemical characteristics, with minimum impurities to meet nuclear industry specification.

Tulsion<sup>®</sup> T-52 Na UPS is specially designed to give an optimized balance of pressure drop, exchange kinetics.

### TYPICAL CHARACTERISTICS

Type	Strong acid cation exchange resin
Matrix structure	Polystyrene Copolymer
Functional group	Sulphonic
Physical form	Moist Spherical Beads
Ionic form	Sodium
Screen Size USS (wet)	16 to 40
Particle size (95% min)	0.4 to 1.2 mm
Uniformity Coefficient	1.4 maxs
Total Exchange Capacity	2.1 meq/ ml (min)
Moisture content	43 ± 3%
Swelling (approx)	Sodium to Hydrogen : 6%
pH range	0 to 14
Solubility	Insoluble in all common solvents
Backwash settled density	830 to 860 g / l
Temperature stability	120 deg C



CHARACTERISTICS	
Maximum operating temperature	140 <sup>o</sup> C
Resin bed depth (minimum)	800 mm
Maximum service flow	120 m <sup>3</sup> /hr/m <sup>3</sup>
Backwash expansion space	40 – 75%
Backwash flow rate for 40-70% expansion	9 – 25 m <sup>3</sup> /hr/m <sup>3</sup>
Regenerant	NaCl
Regeneration level	30 to 160 g/l
Regenerant concentration	10 – 15% NaCl
Regenerant flow rate	2 to 16 m <sup>3</sup> /hr/m <sup>3</sup>
Regeneration time	20 to 60 min
Rinse flow rate : Slow	At regeneration flow rate
: Fast	At service flow rate
Rinse volume	3 – 5 m <sup>3</sup> / m <sup>3</sup>

### 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 lined 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.



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