

TULSION® T- 42 Na N

PREMIUM GRADE STRONG ACID CATION EXCHANGE RESIN

TULSION®T- 42 Na N is a gel type cation exchange resin containing Sulphonic acid as functional group, having excellent resistant to oxidizing agents with high operating capacity.

TULSION®T- 42 Na N is supplied in moist spherical beads, in Sodium form, with excellent physical and chemical characteristics. This product is used for industrial and domestic softening at relatively low regeneration cost.

TULSION® T-42 Na N is NSF grade resin, conditioned during manufacturing to achieve low VOCs as per NSF standard. However it is recommended to follow preconditioning of the resin before use as shown below.

TYPICAL CHARACTERISTICS OF TULSION T-42 Na N

Type	Strong acid cation exchange resin
Appearance	Amber color beads
Functional group	Sulphonic
Physical form	Moist Spherical Beads
Ionic form	Sodium
Screen Size USS (wet)	16 to 50
Particle size (95% min)	0.3 to 1.2 mm
Total Exchange Capacity(minimum)	2.0 meq/ml
Moisture content	45 ± 3%
Reversible swelling(%)	Na+ to H+ : 7
pH range	0 to 14
Solubility	Insoluble in all common solvents
Backwash settled density	810 to 850 g / l (52 - 54 lbs/cft) (Na+)
Temperature stability (max.)	140°C



INFLUENT LIMITATION

Free chlorine	Not traceable
Turbidity	Less than 2 NTU
Iron and heavy metals	Less than 0.1 ppm

SUGGESTED OPERATING PARAMETERS OF TULSION T-42 Na N

Maximum operating temperature	140°C in Na ⁺ form
Resin bed depth (minimum)	600 mm
Maximum service flow	120 m ³ /hr/m ³ (15 gpm/ft ³)
Backwash expansion space	40 to 75%
Backwash flow rate for 40-70% expansion	9 to 25 m ³ /hr/m ³ (4 to 10 gpm/ft ²)
Regenerant	NaCl
Regeneration level	60 - 160 g NaCl / l (3.7 to 1.0 lbs HCl/ft ³)
Regenerant concentration	5.0 - 15.0% NaCl
Regenerant flow rate	2 to 16 m ³ /hr/m ³ (0.25 to 2 gpm/ft ³)
Regeneration time	30 to 60 min
Rinse flow rate : Slow	At regeneration flow rate
: Fast	At service flow rate
Rinse volume	3 to 5 m ³ / m ³

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.

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

PRE-CONDITIONING OF RESIN:

1. Load resin in the column and carry out back wash with process water to expand resin bed at least 50%-60% for 10 minutes. Allow resin to settle and drain water from the column up to resin bed level.
2. Fill resin column with 2 BV DI water and soak it for minimum 12 hrs
3. Drain water up to resin bed level.
4. Carry out brine regeneration using 8 lb/cft NaCl as 6% solution at 2 BV/hr flow rate. Rinse with DM water until effluent is chloride free.



Thermax Limited

LENNTECH

info@lennotech.com Tel. +31-152-610-900
www.lennotech.com Fax. +31-152-616-289