

TULSION® T-240 Na N

Premium Grade Fine Mesh Strong Acid Cation Gel Resin, Na⁺form

Tulsion®T-240 Na N is a premium grade, high efficiency fine mesh strong acid cation gel resin used primarily for softening of potable water streams. Some advantages of using a narrow particle size distribution, fine mesh resin include the ability to achieve higher operating capacities and lower leakage at a given regeneration level, versus standard particle size cation resin.

Tulsion®T-240 Na N has an advantage of faster exchange kinetics inherent with fine mesh resin due to shorter diffusion path within the beads.

In the regeneration cycle, **Tulsion® T-240 Na N** has much faster exchange kinetics which translates to reduced salt consumption and lower rinse water requirements at all regeneration levels.

Tulsion® T 240 Na N offers some clear advantages in residential water softening systems where pressure differential is less critical.

- Better iron removal.
- Less consumption of salt for regeneration.
- Better hardness leakage characteristics.

TULSION® T-240 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 - TULSION® T-240 Na N

Type	: Strong Acid Cation Exchange Resin
Matrix	: Cross-linked polystyrene divinyl benzene
Functional group	: Nuclear Sulphonic
Physical form	: Moist spherical beads
Ionic form	: Sodium
Particle size USS Mesh (minm. 90%)	: 30 to 70, 90% in range
Total Exchange Capacity (min)	: 2.0 meq/ml (Na ⁺)
Moisture content	: 45 ± 3% (Na ⁺)
Reversible swelling (%)	: Na ⁺ → H ⁺ : 7
Shipping weight	: Approx.52 lbs / ft ³
Whole perfect beads	: > 95%
pH range	: 0 to 14
Colour Throw, Alpha	: < 25



INFLUENT LIMITATION

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

TYPICAL OPERATING CONDITIONS – TULSION® T-240 Na N

Maximum operating temperature	: 140 °C (280 °F)
Resin bed depth (min.)	: 600 mm (24")
Standard service flow	: 2-5gpm/ft ³ , 16-40 m ³ /hr/m ³
Regenerant	: NaCl
Regeneration level	: 2-15 lbs/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 mins.
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 resin 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.



PRECONDITIONING 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 inlet water and soak 2 hours.
- 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.

For further information, please contact: resins@thermaxindia.com



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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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