TULSION® T-42 Na BC N

PREMIUM GRADE STRONG ACID CATION EXFCHANGE RESIN

TULSION®T- 42 Na BC N is a premium grade 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 BC 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 BC N exhibits excellent resistance to osmotic shocks due to its high bead strength and offer stable operating capacity.

TULSION®T-42 Na BC 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-42 Na BC N

Type	: Strong Acid Cation Exchange Resin
Appearance	: Black color beads.
Functional group	: Nuclear Sulphonic
Physical form	: Moist spherical beads
Ionic form	: Sodium
Screen size USS (wet)	: 16 to 50
Particle size (minm. 95%)	: 0.3 to 1.2 mm
Total Exchange Capacity (minm.)	: 2.0 meq/ml (Na^+)
Moisture content	: 45 ± 3% (Na^+)
Reversible swelling (%)	: Na^+ -> H^+ : 7
Backwash settled density	: 810 - 850 g/l (52-54 lbs/cft) (Na^+)
Temperature stability (max.)	: 280 °F / 140 °C (Na^+)
pH range	: 0 to 14
Solubility	: Insoluble in all common solvents

TYPICAL OPERATING CONDITIONS – TULSION® T-42 Na BC N

Maximum operating temperature		: 140 °C (280 °F) in Na^+ form
Resin bed depth (min.)		: 600 mm (24")
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 for 'Na' form
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 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 ASTMD-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 date 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 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.

5) Proceed with NSF testing.

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

THERMAX

THERMAX LIMITED
CHEMICAL DIVISION
An ISO 9001 Company
97-E, GENERAL BLOCK,
M.I.D.C. BHOSARI,
PUNE 411 026, INDIA
TEL: +91(20) 2712 0181, 2712 0169
FAX: +91(20) 2712 0206
E-mail: resins@thermaxindia.com

USA Office:
THERMAX INC.
16200 Park Row, Suite 190
Houston, TX 77084
U.S.A
Tel: 281-600-1331
Fax: 281-600-1336

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