

TULSION® T-52 Na BC N

PREMIUM STRONG ACID CATION NUCLEAR GRADE RESIN

TULSION®T- 52 Na BC N is a gel type resin, produced as moist spherical beads, containing Sulphonic acid as the functional group, having excellent resistance to oxidizing agents with high operating capacity.

TULSION®T- 52 Na BC N is most suitable for water treatment and is suited for use in a wide pH range and elevated temperature conditions.

TULSION® T-52 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-52 Na BC N

Type

Matrix structure

Functional group

Physical form

Ionic form

Screen size USS (wet)

Particle size (min. 95%)

Total exchange capacity (meq / ml)

Moisture %

Backwash settled density, g/lit

Temperature stability (max)

pH range

Solubility

: Strong acid cation exchange resin

: Crosslinked copolymer

: Sulphonic

: Black colored moist beads

: Sodium

: 16 to 50

: 0.3 to 1.2 mm

: 2.2 min.

: 43 + 3%

: 830 to 860

: 140 ° C

: 0 to 14

: Insoluble in all common solvent.



TYPICAL OPERATING CONDITIONS - TULSION® T-52 Na BC N

Maximum operating temperature

Resin bed depth (min)
Maximum service flow
Backwash expansion space

Backwash flow Regenerant

Regeneration level Regenerant concentration

Regenerant flow rate Regeneration time Rinse flow rate: Slow Rinse flow rate: Fast

Rinse flow rate: Fa

: 140°C in Na form

: 600 mm : 120 m³/hr/m³ : 40 to 75%

: 9 to 20 m³/hr/m³

: HCI/ H2SO4 for H form; NaCl for Na form

: 30 to 160 g HCl/l ; 40 to 250g/l $H_2SO_4\,;~60$ to 160 NaCl g/l

: 3 to 4% HCI; 1.5 to 5% H₂SO4; 10 to 15% NaCI

: 2 to 16 m³/hr/m³ : 20 to 60 min.

: At regeneration flow rate : At service flow rate

: $3 \text{ to } 5 \text{ m}^3/\text{m}^3$

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 lbs/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



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
Web Address: www.thermaxglobal.com

USA Office: THERMAX INC. 16200 Park Row, Suite 190 Houston, TX 77084 U.S.A

Tel: 281-600-1331 Fax: 281-600-1336

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