

TULSTON® T-42 Na

STRONG ACID CATION EXCHANGE RESIN - SODIUM FORM

Tulsion® **T-42 Na** is a premium grade, strong acid cation exchange resin, with polystyrene matrix with excellent physical and chemical properties, supplied in sodium form.

Tulsion® T-42 Na has exceptional physical and chemical stability. This resin exhibits excellent resistance to osmotic shocks due to its high bead strength and offers stable operating capacity.

Tulsion® T-42 Na is most suitable for softening in water treatment and it is suited for use in a wide range of pH.

| TYPICAL CHARACTERISTICS | | |
|------------------------------|-----------------------------------|--|
| Type | Strong acid cation exchange resin | |
| Matrix structure | Polystyrene Copolymer | |
| Functional group | Nuclear 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 | 2.0meq/ ml (min) | |
| Moisture content | 45 ± 3% | |
| Reversible Swelling (approx) | Sodium to Hydrogen: 7% | |
| pH range | 0 to 14 | |
| Solubility | Insoluble in all common solvents | |
| Backwash settled density | 810 to 850 g/ l | |
| Temperature stability | 140 °C | |



| INFLUENT LIMITATION | | |
|-----------------------|-------------------|--|
| Free chlorine | Not traceable | |
| Turbidity | Less than 2 NTU | |
| Iron and heavy metals | Less than 0.1 ppm | |

| CHARACTERISTICS | |
|---|--|
| Maximum operating temperature | 140°C |
| Resin bed depth (minimum) | 800 mm |
| Maximum service flow | 120 m ³ /hr/m ³ |
| Backwash expansion space | 40 – 75% |
| Backwash flow rate for 40-70% expansion | 9 – 25 m ³ /hr/m ³ |
| Regenerant | NaCl |
| Regeneration level | 30 to 160 g/l |
| Regenerant concentration | 10 – 15% NaCl |
| Regenerant flow rate | 2 to 8 m ³ /hr/m ³ |
| Regeneration time | 20 to 60 min |
| Rinse flow rate: Slow | At regeneration flow rate |
| : Fast | At service flow rate |
| Rinse volume | $3-5 \text{ m}^3/\text{ m}^3$ |

TESTING:

The sampling and testing of ion exchange resins 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 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.



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