



# **TULSION<sup>®</sup> T-42 H UPS**

## **STRONG ACID CATION EXCHANGE RESIN – HYDROGEN FORM**

**Tulsion<sup>®</sup> T-42 UPS** is a premium grade, strong acid cation exchange resin, with polystyrene matrix with excellent physical and chemical properties, supplied in hydrogen as well as sodium form.

**Tulsion<sup>®</sup> T- 42 UPS** has exceptional physical and chemical stability. This resin exhibits excellent resistance to osmotic shocks due to its high bead strength and offer stable operating capacity.

**Tulsion<sup>®</sup> T- 42 UPS** This product is most suitable for water treatment and it is suited for use in a wide range of pH and elevated temperature conditions.

### **TYPICAL CHARACTERISTICS**

Type	Strong acid cation exchange resin
Matrix structure	Polystyrene Copolymer
Functional group	Nuclear sulphonic
Physical form	Moist Spherical Beads
Ionic form	Hydrogen
Screen Size USS (wet)	16 to 40
Particle size (95% min)	0.4 to 1.2 mm
Uniformity coefficient	1.4 max
Total Exchange Capacity	1.8 meq/ ml (min).
Moisture content	52 ± 3%
Swelling (approx)	Sodium to Hydrogen : 7%
pH range	0 to 14
Solubility	Insoluble in all common solvents
Backwash settled density	830 to 840 g / l



## INFLUENT LIMITATION

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

## CHARACTERISTICS

Maximum operating temperature	120°C in H form
Resin bed depth (minimum)	800 mm
Maximum service flow	120 m <sup>3</sup> /hr/m <sup>3</sup>
Backwash expansion space	40 – 75%
Backwash flow rate for 40-70% expansion	9 – 25 m <sup>3</sup> /hr/m <sup>3</sup>
Regenerant	HCl / H <sub>2</sub> SO <sub>4</sub>
Regeneration level	30 to 160 g/l
Regenerant concentration	3 to 4% HCl; 1.5 to 5% H <sub>2</sub> SO <sub>4</sub>
Regenerant flow rate	2 to 16 m <sup>3</sup> /hr/m <sup>3</sup>
Regeneration time	30 to 60 min
Rinse flow rate : Slow	At regeneration flow rate
: Fast	At service flow rate
Rinse volume	3 – 5 m <sup>3</sup> / m <sup>3</sup>

## 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 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.

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