

TULSION[®] T-52 H UPS

PREMIUM GRADE STRONG ACID CATION EXCHANGE RESIN – HYDROGEN FORM

Tulsion[®] T-52 UPS is a gel type, strong acid cation exchange resin, having excellent resistant to oxidizing agents with high operating capacity.

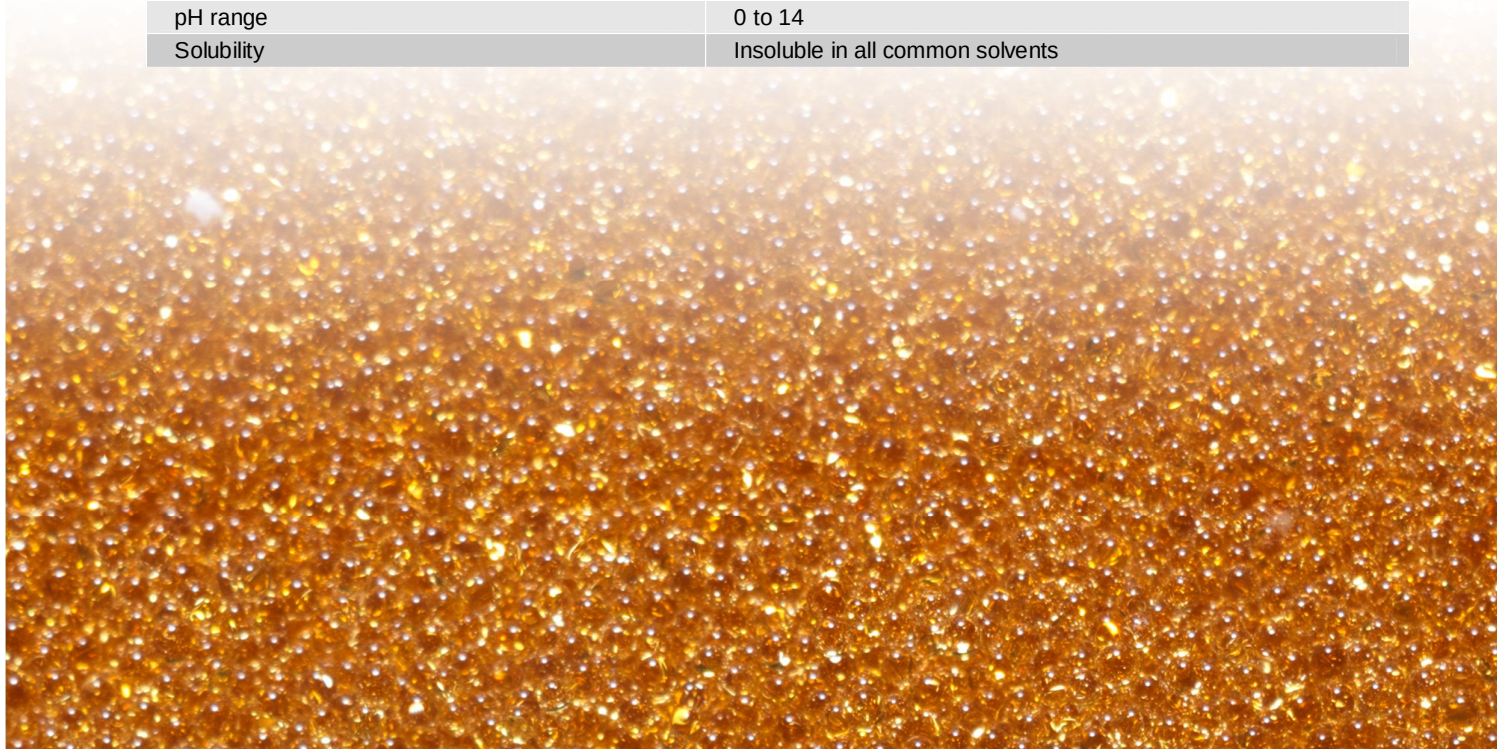
Tulsion[®] T-52 UPS is supplied in moist spherical beads, in hydrogen form, with excellent physical and chemical characteristics, with minimum impurities to meet nuclear industry specification.

Tulsion[®] T-52 UPS can be used with **Tulsion[®] A- 23 UPS** in mixed bed units in water treatment in nuclear industry, which requires high effluent purity, operating capacity and resin life.

Tulsion[®] T-52 UPS is specially designed to give an optimized balance of pressure drop, exchange kinetics, and resistance to separation from the anion exchange resin, when used mixed bed.

TYPICAL CHARACTERISTICS

Type	Strong acid cation exchange resin
Matrix structure	Polystyrene Copolymer
Functional group	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	1.9 meq/ ml (min)
Moisture content	48 ± 3%
Swelling (approx)	Sodium to Hydrogen : 6%
pH range	0 to 14
Solubility	Insoluble in all common solvents



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
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 – 20 m ³ /hr/m ³
Regenerant	HCL or H ₂ SO ₄
Regeneration level	30 to 160 g HCL / lit or 40 to 250 g H ₂ SO ₄ / lit
Regenerant concentration	3 – 5% HCL or 1.5 – 4% H ₂ SO ₄
Regeneration flow rate	2 to 16 m ³ /hr/m ³
Regeneration time	30 to 60 min
Rinse flow rate : Slow	At regeneration flow rate
: Fast	At service flow rate

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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