



TULSION[®] T -42 Na

STRONG ACID CATION EXCHANGE RESIN

Tulsion[®] T-42 Na is a premium quality gel type strong acid cation exchange resin containing nuclear sulphonic acid groups having high exchange capacity combined with excellent physical, chemical stability and operating characteristics. It is suitable for use in wide range of pH and temperature conditions.

Tulsion[®] T- 42 Na is supplied in sodium form. It is used in demineralization unit to remove cationic impurities in hydrogen form.

Tulsion[®] T- 42 Na is also used for de-alkalization and chemical processing.

TYPICAL CHARACTERISTICS OF TULSION T-42 Na

Type of resin	Strong Acid Cation Exchange Resin
Appearance	Amber Color beads
Functional group	Nuclear Sulphonic
Physical form	Moist spherical beads
Ionic form	Sodium
Screen size USS (Wet)	16 to 50
Particle size (minimum) 95%	0.3 to 1.2
Total exchange capacity (mini)	2.0 meq / ml
Moisture content (Approx)	42 to 48 %
Swelling (Approx) (Na ⁺ to H ⁺)	7 %
Backwash Settled Density	810-850g/l (52-54 lbs/cft) (Na ⁺)
pH range	0 to 14
Solubility	Insoluble in all common solvents

INFLUENT LIMITATION

Free Chlorine	Not traceable
Turbidity	<2 NTU
Iron & Heavy metals	< 0.1 PPM

SUGESSTED OPERATING CONDITIONS FOR TULSION T-42 Na

Maximum operating temperature	130°C in Na form
Resin bed depth (min)	600 mm
Maximum service flow	60 m ³ /hr/m ³
Backwash expansion space	40 to 75%
Backwash flow rate for 40-70% expansion	9 to 25 m ³ /hr/m ³
Regenerant	HCl/ H ₂ SO ₄
Regeneration level	30 to 160 g/l
Regenerant concentration	3 to 4% HCl; 1.5 to 5% H ₂ SO ₄ ;
Regenerant flow rate	2 to 16 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 to 5 m ³ /m ³

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.

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



Thermax Limited
 Environment House, Chemical Division,
 90-92, BG Block, MIDC, Bhosari,
 Pune - 411026, India.
 Email: enquiry@thermaxglobal.com
 Phone: +91 20 6715 6000
 www.thermaxglobal.com

Thermax Inc.
 21800 Haggerty Road, Suite 112,
 Northville, MI 48167, USA
 Email: customerservice@thermax-usa.com
 Phone: +1 248 468 0541
 www.thermax-usa.com

Registered Office: Thermax Ltd., D-13, MIDC, Industrial Area, R.D. Aga Road, Chinchwad, Pune-411019, India. RES/PMG/MKTG/2020