THERMAX

TULSION® T - 240

Premium Grade Fine Mesh Strong Acid Cation Gel Resin, Na^+ Form

Tulsion®T-240 is a premium grade, high efficiency fine mesh strong acid cation gel resin used primarily for softening of potable water streams. Some advantages of using a narrow partcle size distribution, fine mesh resin include the ability to achieve higher operating capacities and lower leakage at a given regeneration level, versus standard particle size cation resin.

Tulsion®T-240 has an advantage of faster exchange kinetics inherent with fine mesh resin due to shorter diffusion path within the beads.

In the regeneration cycle, Tulsion® T-240 has much faster exchange kinetics which translates to reduced salt consumption and lower rinse water requirements at all regeneration levels.
Environmentally, this means less salt is needed per regeneration thereby producing lower levels of brine waste for discharge each cycle. The exceptional kinetics of **Tulsion®T-240** makes it possible for point-of-entry systems to meet or exceed the "4,000 grains per pound of salt" mandated in many municipalities.

Tulsion® T 240 offers some clear advantages in residential water softening systems where pressure differential is less critical.

- Better iron removal.
- Less consumption of salt for regeneration.
- Better hardness leakage characteristics.

TYPICAL CHARACTERISTICS – TULSION® Softmax

Type	:	Strong Acid Cation Exchange Resin
Matrix structure	:	Cross-linked polystyrene divinyl benzene
Functional group	:	Sulphonates
Physical form	:	Moist spherical beads
Ionic form	:	Sodium
Total exchange capacity (meq/ml)	:	20 meq/ml in Na^+ form
Particle size USS mesh	:	-30 + 70, 90% in range
Moisture content (approx.)	:	45 % in Na^+ form
Swelling (approx.)	:	Na^+ to H^+, 7%
Whole perfect beads	:	> 80%
Colour throw, Alpha	:	< 25
Shipping weight	:	Approx. 52 lbs/ft^3
pH range	:	0 to 14

INFLUENT LIMITATION

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

TYPICAL OPERATING CONDITIONS – TULSION® Softmax

Maximum operating temperature	:	280 ° F / 140 ° C
Resin bed depth	:	500 mm minm.
Standard service flow	:	2 -5 gpm/ft^3 / 16 - 40 $m^3/hr^3/m^3$
Regenerant	:	NACl
Regeneration levels	:	2 -15 lbs/ft^3
Regeneration concentration	:	5 - 15%
Regeneration time	:	20 - 60 mins.
Regeneration flow rate	:	0.25 - 0.5 gpm/ft^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 sacks	1000 liters
MS drums	180 liters
HDPE lined bags	25 liters

Super sacks	35 cft
Fiber drums	7 cft
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 as per BIS/ASTM. We recommend that the user should determine the performance of the product by testing on own processing equipment.

For further information, please contact:

THERMAX

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CHEMICAL DIVISION

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