TIGG CAT
Metals Removal Media

www.TIGG.com

DESCRIPTION

TIGG CAT is a light colored, high capacity, get type sulfonated polystyrene cation resin supplied in the sodium form as moist, touch uniform spherical beads. TIGG CAT is intended for use in water softening applications.

FEATURES & BENEFITS

- Complies with FDA regulations for potable water applications
  conforms to paragraph 21CFR173.25 of the Food Additives Regulations of the F.D.A.
- NSF/ANSI-61 Certified for Material Safety
- Controlled Particle Size
  16 to plus 50 mesh range; gives a lower pressure drop while maintaining superior kinetics.
- Superior Physical Stability
  90% plus sphericity and high crush strengths together with carefully controlled particle distribution provide greater resistance to bead breakage while maintaining low pressure drops.
- Low Color Throw

PHYSICAL PROPERTIES

Polymer Structure	Styrene Crosslinked with DVB
Functional Group	$R\text{-}(SO_3)^{-M+}$
Ionic Form, as shipped	Sodium
Physical Form	Tough, Spherical Beads
Screen Size Distribution	16 to 50
pH Range	0 to 14
Sphericity	90+ percent
Uniformity Coefficient	Approx. 1.6
Water Retention Sodium Form	46 to 50
Solubility	Insoluble
Shipping Weight Sodium Form	50 lbs./cu.ft.
Total Capacity Sodium Form	1.90 meq/ml min.

724-703-3020
www.TIGG.com
TIGG LLC
1 Willow Avenue
Oakdale, PA 15071

Manufacturing
Steel Tanks & Pressure Vessels

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SUGGESTED OPERATING CONDITIONS

Maximum Temperature Sodium Form	250◦ F
Minimum Bed Depth	24 inches
Backwash Rate	50 to 75% Bed Expansion
Regenerant (NaCl or KCl)	
Concentration	10 to 15 percent
Flow Rate	0.5 to 1.5 gpm/cu.ft.
Contact Time	> 20 minutes
Level	4 to 15 pounds/cu.ft
Displacement Rate	Same as Regen Flow Rate
Volume	10 to 15 gallons/cu.ft.
Fast Rinse Rae	Same as Service Flow Rate
Volume	35 to 60 gallons/cu.ft.
Service Flow Rate	1 to 10 gpm/cu.ft.

OPERATING CAPACITY

Sodium Chloride (NaCl) Regeneration

The sodium cycle operating capacity TIGG CAT for hardness removal at various regeneration levels with an influent calcium/magnesium ration of 2/1 and a hardness level of 500 ppm, as $CaCO_3$, is shown in the following table

Pounds NaCl/cu.ft.	Capacity Kilograins/cu.ft.
5	20.0
7.5	25.4
10	29.0
10	33.0

Potassium Chloride (KCl) Regeneration

The potassium cycle operating capacity of TIGG CAT for hardness removal at various regeneration levels with an influent calcium/magnesium ration of 2/1 and a hardness level of 500 ppm, as $CaCO_3$, is shown in the following table:

Pounds KCl/cu.ft.	Capacity Kilograins/cu.ft.
5	16.6
7.5	21.8
10	26.6
15	31.2

Standard packaging is in TIGG CANSORB pre-engineered vessels

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