Last modified: 14-Feb-2024

CGS10-H

DESCRIPTION

CGS10-H is a premium grade hydrogen form highly crosslinked gel strong acid cation resin with high resistance to both thermal and chemical oxidation. It is intended for use in industrial applications where the importance of durability supersedes efficiency. It is particularly resistant to oxidation by chlorine or chloramines.

PHYSICAL PROPERTIES

Polymer Type	Gel
Functional Group	Sulfonic Acid
Ionic Form (as shipped)	Hydrogen (H^+)
Physical Form	Spherical Beads
Capacity (meq/mL)	1.90
Moisture Retention (%)	47 to 56
Reversible Swelling (%)	5 to 9 (Na → H)
Particle Size	US Mesh (µm): 16 (1190) to 50 (297)
< 50 mesh (300 µm) (%)	< 1%
Minimum Sphericity (%)	93
Uniformity Coefficient	1.60
Color	Amber

CERTIFICATIONS

REACH Registered	Yes

STANDARD PACKAGING

42 cu.ft. Supersack | 7 cu.ft. Drum

25L Bag | 1000L Supersack

OPTIONAL PACKAGING

1 cu.ft. Bag | 5 cu.ft. Drum

25L Bag | 140L Drum

OPERATING CONDITIONS

Maximum Continuous Temperature	250°F (121°C)
Bed Depth	24 in. (61.0 cm)
Backwash Expansion	25 to 50%
Maximum Pressure Loss	25 psi (172.38 kPa)
Operating pH Range	0 to 14

REGENERATION DETAILS

Service Flow Rate	1 - 10 gpm/cu.ft. (8 - 80 BV/h)
Hydrogen Cycle (H_2SO_4) Concentration	1 to 8%
Hydrogen Cycle (HCl) Concentration	5 to 10%
Regeneration Level	4 - 15 lbs/cu.ft. (64.1 - 240.3 g/L)
Regeneration Flow Rate	0.5 - 1.5 gpm/cu.ft. (4 - 12 BV/h)
Regenerant contact time	> 20 minutes
Displacement flow rate	Same as dilution water
Displacement Volume	10 to 15 gals/cu.ft. (1 to 2 BV)
Rinse Flow Rate	Same as service flow
Rinse Volume	35 - 60 gals/cu.ft. (5 - 8 BV)

IMPORTANT NOTES

Have a question?

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CAUTION: Do not mix ion exchange products with strong oxidizing agents. Nitric acid and other strong oxidizing agents can cause explosive reactions when mixed with organic materials, such as ion exchange

resins.

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