



Product Description

The "G-Ion" brand GC-100 is a sort of Cation exchange resin that has sulfonic group (-SO₃H) in the styrene-diethylene benzene copolymer with 7% cross-linked degree. It is used mainly to soft hard water and produce pure water, as well as used in the hydro-metallurgy and sugar producing and medicine and no sodium glutamate industry, it can be used as catalyzer and dehydrating agent.

Executing standard: GB13659-1992 DL/T 519-2004 SH2605.01-2003

Typical physical and chemical properties:

ITEMS	DATA
Appearance	Palm yellow to burnt brown spherical grain
Ionic form	Na
Moisture content %	45.00-50.00
Total exchange capacity mmol/g	≥4.50
Total exchange capacity mmol/ml	≥1.90
Shipping weight g/ml	0.77-0.87
True density g/ml	1.250-1.290
Particle size range %	(0.315mm-1.250mm) ≥95.0
Lower limit size %	(<0.315mm) ≤1.0
The effective size mm	0.400-0.700
Uniformity coefficient	≤1.60
Sphericity after attrition %	≥90.00

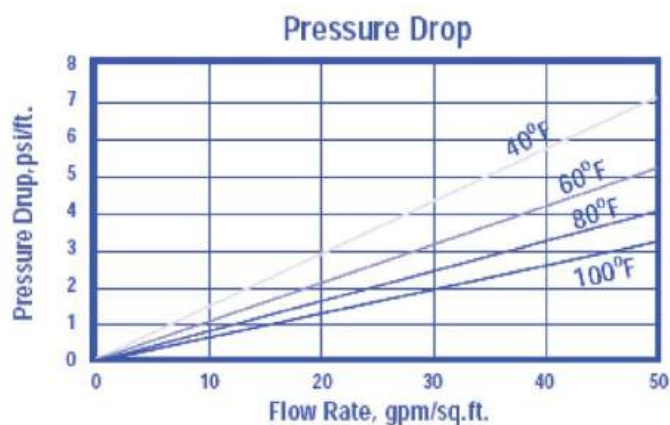
Reference indexes in using

ITEMS	Reference Value
PH range	1-14
Max. operation temperature in sodium form °C	120
Swelling upon complete conversion (Na ⁺ -H ⁺) %	≤10
Working exchange capacity mmol/L	≥1200

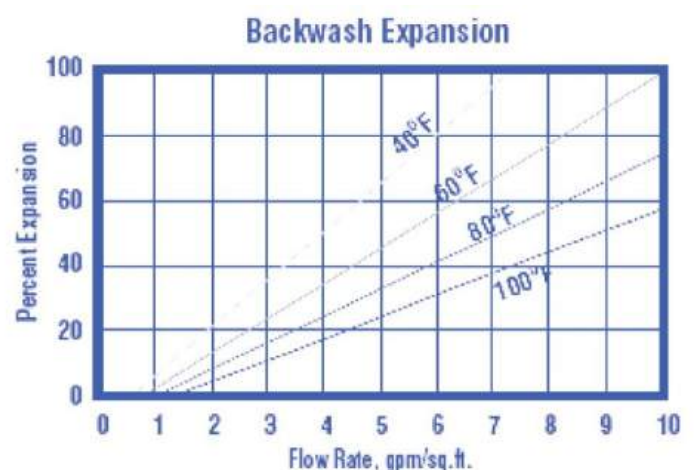
Suggested Operating Conditions

Maximum Temperature	
Na ⁺ form	120°C (248°F) max.
H ⁺ form	100°C (212°F) max.
Minimum Bed Depth	0.6 m (24 inches)
Backwash Rate	50-75% bed expansion
Regeneration	
Regenerant Concentration	8-12% NaCl or saturated salt water
Flow Rate	2 to 7 BV/h (0.25 to 0.90 gpm/cu.ft)
Contact Time	At least 30 Minutes
Displacement Rinse Rate	Same as Regenerant Flow Rate
Displacement Rinse Volume	10-15 gallons/cu.ft
Fast Rinse Rate	Same as Service Flow Rate
Fast Rinse Volume	35-60 gallons/cu.ft

Hydraulic Properties



Pressure Drop: The graph above shows the expected pressure loss per foot of bed depth as a function of flow rate at various Temperatures.



Backwash: After each cycle the resin bed should be backwashed at a rate that expands the bed 50 to 75 percent. That will remove any foreign matter and reclassify the bed. The Graph above shows the expansion characteristics of G-ion GC 100 in the sodium form.

Packing and Storing Conditions

25 Ltr printed bag. Resins should be stored in their original unopened packaging in a cool dry area. An indoor storage facility with climate control between 0-40° C (32-105° F) should be used for the best results. Storage temperatures above 40° C (105° F) can cause premature loss of capacity for anion resins, particularly those stored in the OH-form. While cation resins can withstand higher temperatures (up to 80° C/175° F), it is best to store all resins under similar conditions. Storage temperatures below 0° C (32° F) can cause resin freezing. Tests of G-ion resins under repeated freeze-thaw cycles show that bead damage can occur, so frozen resin must be thawed before safe loading can take place. Frozen resin should be thawed out completely under room temperature conditions before loading and use.