



Product Description

The "G-Ion" GA-400 is a sort of anion exchange resin that has quaternary ammonium group $[-N(CH_3)_3OH]$ in the styrene-diethylene benzene copolymer with 4% cross linking degree. It is used mainly to produce pure water and ultra pure water and decolorize sugar solution and extract biochemical substance and radioelement.

Executing standard: HG/T2163-1991 DL/T519-2004

Typical physical and chemical properties:

| ITEMS | DATA |
|--|----------------------------------|
| Appearance | Flaxen to chryso spherical grain |
| Ionic form | Cl |
| Moisture content % | 50.00-60.00 |
| Total exchange capacity mmol/g | ≥ 4.00 |
| Strong function group exchange capacity mmol/g | ≥ 3.70 |
| Total exchange capacity mmol/ml | ≥ 1.10 |
| Shipping weight g/ml | 0.66-0.71 |
| True density g/ml | 1.06-1.10 |
| Particle size range % | (0.315-1.25mm) ≥ 95 |
| Lower limit size % | (<0.315 mm) ≤ 1 |
| The effective size mm | 0.45-0.70 |
| Uniformity coefficient | ≤ 1.60 |
| Sphericity after attrition % | ≥ 90 |

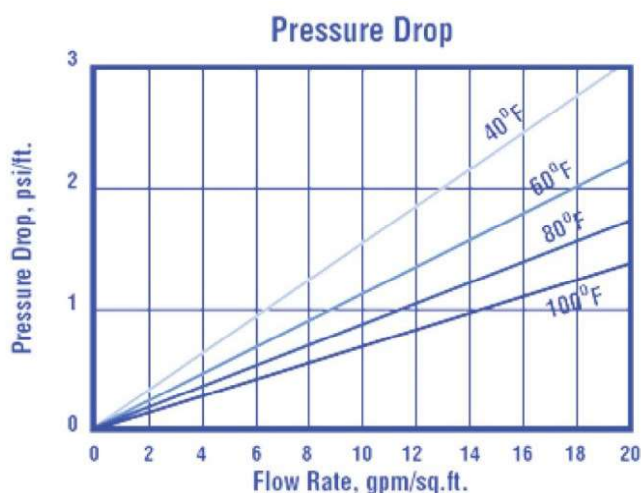
Reference indexes in using

| ITEMS | Reference Value |
|---|-----------------|
| PH range | 1-14 |
| Max. operation temperature in chlorine form °C | 80 |
| Swelling upon complete conversion (Cl ⁻ -OH ⁻) % | ≤ 28 |
| Working exchange capacity mmol/L | ≥ 480 |

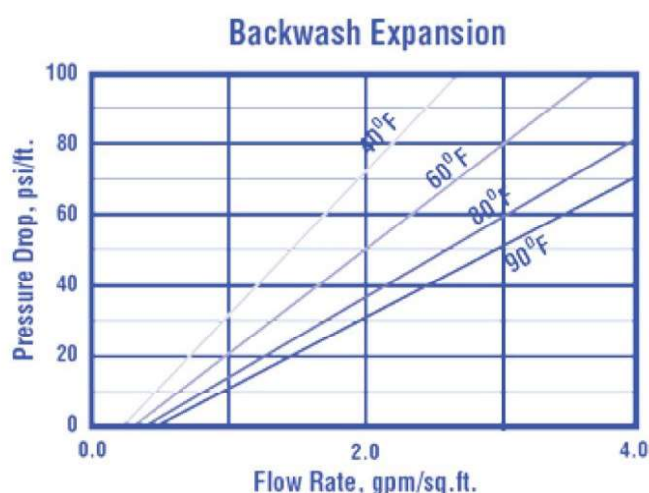
Suggested Operating Conditions

| | |
|---------------------------|--------------------------------------|
| Maximum Temperature | |
| Cl ⁻ form | 100°C (212°F) max. |
| OH ⁻ form | 60°C (140°F) max. |
| Minimum Bed Depth | 0.6 m (24 inches) |
| Backwash Rate | 50-75% bed expansion |
| Regeneration | |
| Regenerant Concentration | 4-6% NaOH |
| Flow Rate | 2 to 4 BV/h (0.25 to 0.50 gpm/cu.ft) |
| Contact Time | At least 60 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.

GA400

Styrene Series Strongly Basic Anion Exchange Resin

www.g-ionresin.com

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.