



LC701

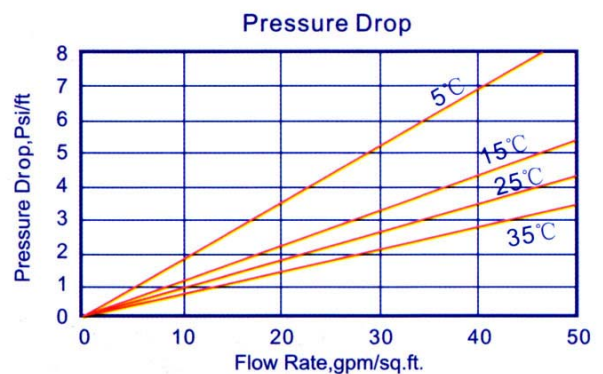
STRONG ACID CATION EXCHANGE RESIN

IOL LC701 is a high purity, high capacity, gel type sulphonate polystyrene cation exchange resin supplied in the sodium form as moist, tough, uniform spherical beads. IOL LC701 is intended for use in all water softening, deionization and preparation of pure water. IOL LC701 is in compliance with the U.S. Food and Drugs Code of Federal Regulations section 21 paragraph 173.25

PHYSICAL & CHEMICAL PROPERTIES

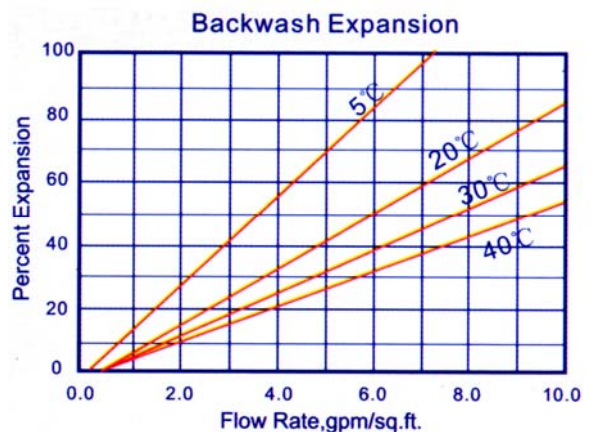
Appearance	Palm yellow spherical beads
Polymer Matrix Structure	Styrene - DVB
Type	Gel strong acid
Functional Group	$R-(SO_3)^-M^+$
Ionic Form	Na^+
Moisture Content	45 – 50 %
Capacity in Volume	≥ 1.9 meq/ml min
Shipping Weight	0.77– 0.87 g/ml
Density	1.25– 1.29 g/ml
Particle Size Range (0.315 – 1.250 mm)	≥ 95 %
Effective Particle Size Range	0.40 – 0.60 mm
Uniformity Coefficient	≤ 1.60
Swelling ($Na^+ \rightarrow H^+$)	≤ 10 %
Sphericity	≥ 90 %
Screen Size Range	0.315mm to 1.25mm; 50-16 mesh

HYDRAULIC PROPERTIES



PRESSURE DROP

The graph shows the expected pressure loss per foot of bed depth as a function of flow rate, at various temperatures.



* 1 m/h equals 0.41 gpm/sq.ft

BACKWASH

After each cycle the resin bed should be backwashed at a rate that expands the bed 25 to 50 percent. This will remove any foreign matter and reclassify the bed. The graph above shows the expansion characteristics of IOL LC701 in the sodium form.



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SUGGESTED OPERATING CONDITIONS

pH Range	0 - 14
Temperature	≤ 120 °C (For Na Form) ≤ 100 °C (For H Form)
Minimum Bed Depth	0.6 m
Regenerant Concentration	8 – 12 % (For NaCl) 5 % (For HCl)
Regenerant Flow Rate	4 – 5 m/h (For NaCl) 3 – 5 m/hr (For HCl)
Regenerant Contact Time	≥ 30 min
Displacement Rinse Rate	4 – 5 m/h (For NaCl) 3 – 5 m/h (For HCl)
Displacement Rinse Time	≥ 30 min
Fast Rinse Rate	15 – 30 m/h
Fast Rinse Time	10 – 30 min
Service Flow Rate	15 – 30 m/h

APPLICATIONS

DEMINERALIZATION

IOL LC701 can be used in multiple and mixed bed demineralizers with strongly basic anion exchangers such as IOL LA703, LA153, LA203.

SOFTENING

IOL LC701 is ideally suited for industrial softening applications because of its high capacity and good physical stability.

* For potable water applications, the resin must be properly pre-treated, usually by multiple exhaustion and regeneration cycles, to insure compliance with extractable levels.

PACKING

PE lined with plastic bag. Net weight: 25 litres (21 kg.) / Bag

* CAUTION: DO NOT MIX ION EXCHANGE RESIN 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.

Material Safety Data Sheets (MSDS) are available for all IOL products. To obtain a copy, contact your local sales representative or our corporate headquarters. They contain important health and safety information. That information may be needed to protect your employees and customers from any known health and safety hazards associated with our products. We recommend that you secure and study the pertinent MSDS for our products and any other products being used. These suggestions and data are based on information we believe to be reliable. They are offered in good faith. However we do not make any guarantee or warranty. We caution against using these products in an unsafe manner or in violation of any patents; further we assume no liability for the consequences of any such actions.