

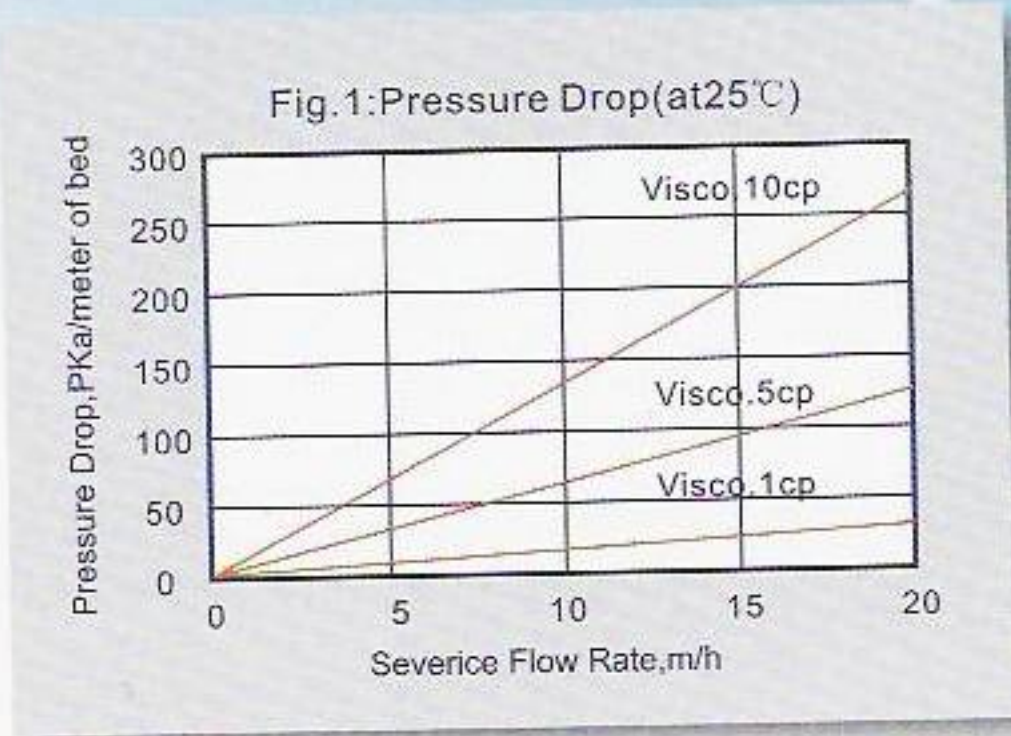
DESCRIPTION

ZHENG GUANG ZGD730CI is an acrylic, macroreticular, strongly basic, anion exchange resin supplied in the chloride form as moist, tough, uniform spherical beads. It is especially useful in the decolorization of liquid sugar syrups. It contains quaternary amine functional sites on a crosslinked acrylic polymer matrix. The high porosity of its macroreticular structure allows excellent removal of large organic molecules from liquid sugars and other food streams. The acrylic composition of the matrix provides excellent desorption of organic color bodies during regeneration eliminating the fouling associated with other types of decolorizing resins. **ZHENG GUANG ZGD730CI** also exhibits excellent resistance to physical breakdown by attrition and osmotic shock.

ZHENG GUANG ZGD730CI can be used alone as a gross decolorization resin for highly colored sugar solutions (greater than 500 ICUMSA) or in combination where the latter is used as a polisher for very low color final products. The use of ion exchange based decolorization has proven to be more effective and more economical than carbon or bone char based technologies for the decolorization of sugar solutions.

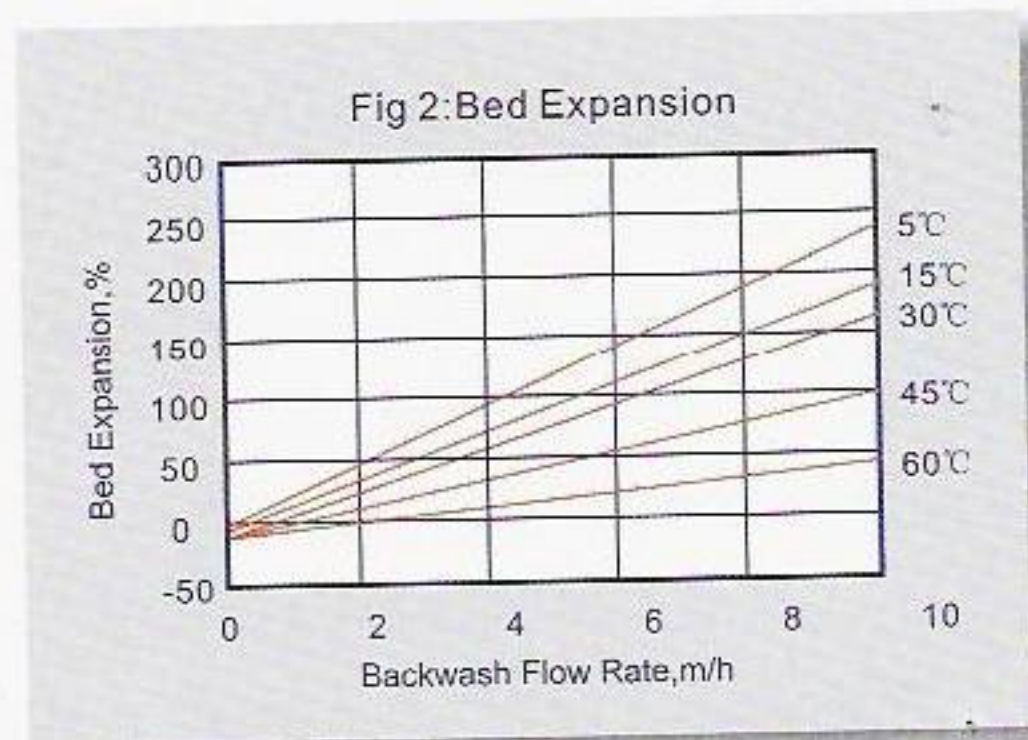
FEATURES & BENEFITS

- **HIGHEST OPERATING CAPACITY OF ANY NITRATE SELECTIVE RESIN**
The unique amine functional group has been optimized to retain the highest operating capacity for a selective resin.
- **HIGHLY UNIFORM PARTICLE SIZE, LOW PRESSURE DROP**
0.315mm to 1.25mm size range; giving a LOWER PRESSURE DROP while maintaining SUPERIOR KINETICS.
- **SUPERIOR PHYSICAL STABILITY**
95% plus sphericity and low swelling together with a macroporous structure and a very uniform particle size provide greater resistance to bead breakage.



PRESSURE DROP

Fig 1 shows the expected pressure loss per foot of bed depth as a function of flow rate and viscosity of the solution to be treated.



BACKWASH

Fig 2 shows after each cycle the resin bed should be backwashed at a rate that expands the bed 50 to 75 percent at various water temperature. This will remove any foreign matter or fines and reclassify the bed.

ZHENG GUANG ZGD730CI

PHYSICAL PROPERTIES

Polymer Structure	Acrylic with DVB
Functional Group	Quaternary ammonium
Ionic Form, as shipped	Chloride
Physical Form	White opaque beads
Screen Size Distribution	0.315mm~1.25mm
	>1.25mm
	<0.315mm
pH Range	0 to 14
Water Retention	
Chloride Form	65 to 75percent
Solubility	Insoluble
Approximate Shipping Weight	
Chloride Form	0.65~0.72 g/ml
Swelling Cl- to OH- Form	20 percent max
Total Capacity	0.80 mmmol/ mL

SUGGESTED OPERATING CONDITIONS

Maximum Temperature	
Cl form	75°C
Minimum Bed Depth	700mm
Backwash Rate	50 to 75 % Bed Expansion
Regenerant and Concentration	NaCl(10%)+NaOH(0.2 - 0.5%)
Regenerant Flow Rate	2 to 4BV/h
Regenerant Contact Time	At least 30 Minutes
Regenerant Level	150 to 250 g / L-R.
Displacement Rinse Rate	Same as Regenerant Flow Rate
Displacement Rinse Volume	2 BV
Fast Rinse Rate	Same as Service Flow Rate
Fast Rinse Volume	2 to 8 BV
Service Flow Rate	2 to 8 BV

*1 BV(Bed Volume)=1m³ solution per m³ resin.

All our products are produced in ISO 9001-2000 certified manufacturing facilities.

***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 ZhengGuang Resin Co., Ltd. products. To obtain a copy, contact your local ZhengGuang 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. Our 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.