

Macroporous Strong Basic Anion Exchange Resin

D201

D201 is polystyrene skeleton macroreticular strongly basic anion exchange resin, containing the $-N(CH_3)_3$, equivalent to a solid alkali. Have excellent physical abrasion resistance and resistance to chemical penetration ability and good silicon removal performance. Mainly used for desalination. Can also be used for cyanide pulp adsorption of cicc.

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Name	Specification
Appearance	Opalescent to light gray opaque spherical beads
Ionic Form	Cl ⁻
Weight Exchange Capacity	≥3.7mmol/g
Volume Exchange Capacity	≥1.2mmol/ml
Real Density (g/ml)	1.06~1.10g/ml
Bulk Density (g/ml)	0.65-0.73g/ml
Water Retention Capacity	50-60 %
Particle Size Range	0.315~1.25 mm≥95
Uniformity Coefficient	≤1.60
Whole Bead Count (%)	≥95%

Reference Operation Conditions

Maximum operating temperature	100℃
Resin filling height	1~3m
Operating velocity	2~10BV/h
Backwash velocity	4~10BV/h
Regeneration (desorption) velocity	1~2BV/h
Regeneration agent	2BV3~5%HCl, 2BV2~4% NaOH

Application

- Desalination
- Cyanide pulp adsorption of cicc

Corresponding Brands

- Amberlite 200
- Lewatit Sp-210
- Diaion PA308

Precautions

- Resin should be wet state preservation. The best temperature is above 0°C. Resin should be put into a closed space or add in salt water of 5% or above if not used for a long time. Should be anti-freezing during transportation. Do not place heavy objects on the resin in case being crashed.
- Generally requires alkali- water - acid - water flow path for processing. Strict requirement needs three circulation before coming to final ion kenel.
- Need to consider different transformation expansion rate to set aside enough space to prevent resin overflow and ensure the appropriate liquid level height; Column diameter ratio should be within a reasonable range and avoid bias current; Use wet packed column or back-flushing to wash away bubbles inside resin layer.
- Before liquid going into the resin column, steps as flocculation, filtration, or sand-filtration should be taken so that it doesn't jam resin pore with suspended solids .
- Resin inside the column that hasn't been used for a long time should be storaged outside of the column after washing, or adding salt water in the salt resistant medium while keeping liquid level not dehydrated with usual backwashing to loosen resin in case of agglomeration.