

## Cationic catalytic resin

FT-D10H cationic catalytic resin is a polystyrene matrix, macroporous strongly acidic cation exchange resin. Uniform pore size, high mechanical strength. Mainly used for high-speed mixed bed water treatment.

### Index

Name	Specification
Appearance	White to light yellow opaque spherical beads.
Polymer	Styrene-DVB-Copolymer, Macroporous
Functional Group	Sulfuric Acid
Ionic Form	H <sup>+</sup>
Weight Exchange Capacity	≥4.35mmol/g
Volume Exchange Capacity	≥1.7eq/L ( 5.4eq/kg)
Real Density (g/ml )	1.16~1.28g/ml
Bulk Density (g/L)	800g/L
Water Retention Capacity	53 ~ 58%
Particle Size Range	0.4~1.25 mm≥95
Uniformity Coefficient	≤1.6
Whole Bead Count ( % )	≥95%
Specific surface area	33m <sup>2</sup> /g
Average pore size	235Å
Pore volume	0.21cc/g
Maximum temperature	≤150°C

### Reference Operation Conditions



## FAMICO TRADING LIMITED

Henleaze Business Centre, 13 Harbury Rd.

Bristol, BS9 4PN, United Kingdom

Tel: +44 7585 973710 , +44 117 244 3581

[www.famico.uk](http://www.famico.uk)

[david@famico.uk](mailto:david@famico.uk)

[shireenn@famico.uk](mailto:shireenn@famico.uk)

Maximum operating temperature	150°C
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

- High-speed mixed bed water treatment
- Recycling of precious metals
- Organic catalysis

### 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 stored 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.