## Strong acid polystyrene type cation resin

A strong acid polystyrene gel type cation resin. It has:

- High exchange capacity
- High mechanical strength
- Uniform particle with good hydraulics characteristic
- Good selectivity
- Good thermo-tolerant characteristic
- Excellent physical and chemical stability

| Specification:           |   |  |  |
|--------------------------|---|--|--|
| Polymer structure—       | Styren-DVB                              |  |  |
| Functional group         | HSO <sub>3</sub> <sup></sup>            |  |  |
| Appearance               | Light brown bead                        |  |  |
| Ionic form               | Na <sup>+</sup> type                    |  |  |
| Total exchange capacity— | ≥4.5 mmol/g(dry) (Na <sup>+</sup> type) |  |  |
| Total exchange capacity— | ≥1.8 mmol/ml (Na <sup>+</sup> type)     |  |  |
| Moisture content—        | 45-52% (Na <sup>+</sup> type)           |  |  |
| Density—                 | 1.25-1.29 g/ml (Na <sup>+</sup> type)   |  |  |
| Shipping weight          | 0.77-0.87 g/ml (Na <sup>+</sup> type)   |  |  |
| Particle size            | 0.315-1.25 mm ≥95%                      |  |  |
|                          | $< 0.315 \text{ mm} \qquad \leq 1\%$    |  |  |
| Attrition rate           | ≥80%                                    |  |  |
| Swell, Max.———————       | Na <sup>+</sup> - H <sup>+</sup> 10%    |  |  |

## **Recommended operation parameters:**

| Operating temperature, Max.                            | 120 °C                |           |            |  |
|--|-----------------------|-----------|------------|--|
| Bed depth, Min. —————————                              | 800 mm                |           |            |  |
| Service flow rate ———————————————————————————————————— | 5-25BV*/h             |           |            |  |
| Service flow rate, Max.———————                         | 40 m/h                |           |            |  |
| Regenerant —————                                       | NaCl                  | HCl       | $H_2SO_4$  |  |
| Consumption (as 100%) ——————                           | 80-220g/l             | 50-150g/l | 80-240g/l  |  |
| Concentration ————————                                 | 5-10%                 | 5-8%      | 0.7-6%     |  |
| Flow rate ————————————————————————————————————         | 2-8 BV*/h             | 2-5 BV*/h | 2-20 BV*/h |  |
| Contact time, Min———————                               | 30 min                |           |            |  |
| Slow rinse ————————————————————————————————————        |                       |           |            |  |
| Fast rinse —————————                                   | 4-8BV* (Service flow) |           |            |  |

Note:  $1 \text{ BV}=1 \text{ m}^3 \text{ media}/1 \text{ m}^3 \text{ resin}$ .

All above data are for your reference. Please adjust according to your equipment and operation condition.