

## PRODUCT DATA SHEET

**AMPS****Product Description**

2-acrylamido-2-methylpropanesulfonic acid is an alkene monomer with sulfonic acid groups. Its structural formula contains strong anionic, water-soluble sulfonic acid groups, shielded amide groups, and unsaturated double bonds, making it have excellent comprehensive properties, including good complexation, adsorption, biological activity, surface activity, hydrolysis stability, and thermal stability. In aqueous solution, the hydrolysis rate of AMPS monomer is very slow, and its sodium salt aqueous solution, especially under conditions with a pH value greater than 9, has excellent hydrolysis resistance. Under acidic conditions, the hydrolysis resistance of AMPS homopolymer is much higher than that of polyacrylamide.

**Application scope**

- Oilfield Chemistry: The application of products in the field of oilfield chemistry is developing rapidly. The scope includes oil well cement additives, drilling fluid treatment agents, acidifiers, fracturing fluids, completion fluids, and repair fluid additives.
- Water treatment: homopolymers of AMPS monomers or copolymers with monomers such as acrylamide and acrylic acid can be used as sludge dewatering agents in wastewater purification processes
- Synthetic fiber: AMPS is an important monomer for improving the overall performance of certain synthetic fibers, especially acrylic or acrylic chlorinated polyester fibers, which can significantly enhance the whiteness, dyeability, anti-static, breathability, and flame retardancy of the fibers
- Textile slurry: a copolymer of 2-acrylamido-2-methylpropanesulfonic acid, ethyl acetate, and acrylic acid, which is an ideal slurry for cotton and polyester blends. It has the characteristics of easy use and easy removal with water.
- Paper making: Polymers of 2-acrylamido-2-methylpropanesulfonic acid and other water-soluble monomers are essential chemicals for various paper mills. They can be used as drainage aids, adhesives, to increase paper strength, and as pigment dispersants for color coatings.

**Technical Specification**

| Items                                            | Specification            |
|--------------------------------------------------|--------------------------|
| Appearance                                       | White Powder or Particle |
| Effective Content, %                             | ≥99.00                   |
| Melting point, °C                                | ≥185 (dec.)              |
| Color (25% aqueous solution, Pt-Co scale), Hazen | ≤50                      |
| Acid Value, mgKOH/g                              | 260~280                  |
| Iron Content, %                                  | ≤0.0005                  |
| Non-volatile Matter, % (120°C, 2h)               | ≥99.0                    |
| Moisture, %                                      | ≤0.5                     |

**Packing, Storage**

- The product packaging is arranged according to customer requirements and stored indoors in a cool and dry place with a storage period of one year.