



TECHNICAL DATA SHEET

Product Name:

2-Acrylamido-2-methylpropane sulfonic acid (AMPS)

Synonyms:

AMPS; 2-ACRYLAMIDO-2-METHYLPROPANE-1-SULFONIC ACID;

Chemical Formula: $C_7H_{13}NO_4S$

Molecular Weight: 207.25 g/mol

CAS Number: 15214-89-8

EINECS Number: 239-268-0

Description:

AMPS is a highly reactive hydrophilic sulfonic acid monomer. It is widely used in the synthesis of high-performance water-soluble polymers, thanks to its strong anionic character, thermal stability, and resistance to hydrolysis. AMPS can be copolymerized with a variety of monomers including acrylamide, acrylic acid, and acrylates.

Typical Specifications:

Parameter	Specification
Appearance	White to off-white crystalline powder
Purity (by HPLC)	$\geq 99.0\%$
Sulfate (SO_4^{2-})	$\leq 0.1\%$
Iron (Fe)	≤ 5 ppm
Moisture	$\leq 1.0\%$
Free acid (as H_2SO_4)	$\leq 0.5\%$
pH (5% solution)	2.0–3.0
Melting Point	~ 270 °C (decomposes)

Applications:

Water treatment: Used in the production of scale inhibitors and dispersants.

Oilfield chemicals: Applied in drilling fluids, fracturing fluids, and enhanced oil recovery polymers.

Textiles & adhesives: Improves dye uptake and water resistance in coatings.

Superabsorbent polymers (SAP): Enhances performance in hygiene products.

Construction chemicals: Added to concrete admixtures to improve flow and strength.

Electronics: Used in photoresists and conductive polymer materials.

Packaging:

25 kg fiber drum or kraft paper bag with inner PE liner
Customized packaging available upon request

Storage & Handling:

Store in a cool, dry, and ventilated area
Keep container tightly sealed and away from moisture
Avoid inhalation of dust and contact with skin or eyes
Shelf life: 12 months under proper storage conditions

Safety Information:

Non-flammable but may irritate eyes and skin
Use PPE (gloves, mask, goggles) during handling
Refer to MSDS for complete safety guidelines

