ZAOZHUANG KAIRUI WATER TREATMENT CO., LTD.

Acrylic Acid-2-Acrylamido-2-Methylpropane Sulfonic Acid Copolymer (AA/AMPS)





CAS No.	40623-75-4	EINECS No.	609-852-3
Molecular Formula	(C3H4O2)n(C7H12NSO4)m	Molecular Weight	400~800

Structural Formula

Product Features

AA/AMPS is the copolymer of acrylic acid and 2-acrylanmido-2-methylpropanesulfonic acid. Due to including carboxylic group (scale inhibition and dispersion) and sulfonic acid group (strong polarity) in this copolymer, AA/AMPS has high calcium tolerance and good scale inhibition for calcium phosphate, calcium carbonate and zinc scale. When built with organophosphines, the synergic effect is obvious. AA/AMPS is suitable to be used in water quality of high pH and high alkaline, it is one of the ideal scale inhibitor and dispersant on high concentration index.

AA/AMPS is a high-quality phosphate stabilizer and a very effective dispersant in all organic cooling water treatments that rely on the corrosion inhibiting properties of organic phosphonates. It acts as mineral scale dispersant, a calcium phosphonate stabilizer and long with organic phosphonate, as a threshold mineral scale inhibitor, additionally; it disperses any calcium phosphate formed organic phosphonates degraded by oxidizing biocides such Chlorine.



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Technical Specification

Parameter	Standard
Appearance	Colorless to pale yellow viscous liquid
Solid content, %	40 min
Free monomer (as AA), %	0.5 max
Density (20℃), g/cm³	1.15 min
pH(1% water solution)	3.5~4.5

Applications & Usage

AA/AMPS can be used as scale inhibitor and dispersant in open circulating cool water system, oilfield refill water system, metallurgy system and iron & steel plants to prevent sediment of ferric oxide. When built with organophosphorines and zinc salt, the suitable pH value is 7.0~9.5. AA/AMPS can also be used as dyeing auxiliaries for textile.

Scale & Corrosion Inhibition Performance

CaCO₃ inhibition	Ca ₃ (PO ₄) ₂ inhibition	CaC₂O₄ inhibition	Silicate inhibition
Good	Excellent	Good	Good
Calcium tolerance	Clay/Silt Dispersion	Iron Oxide Dispersion	Thermal Stability
Excellent	Excellent	Excellent	Very Good

Package & Storage



Address: No.1, Fuqian South Road, Xuecheng Chemical Industrial Park, Xuecheng District, Zaozhuang City, Shandong Province, China kairuiwater.com | krwater.com



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Hazard & Safety Precaution

Hazard Information	Safety Precaution	
Not regulated		
Once contacted with eye and skin, flush with plenty of clean water.		

Alternative Name / Synonyms

- AA-AMPS;
- AA-AMPSA;
- Acrylic Acid-2-Acrylamido-2-Methylpropane Sulfonic Acid Copolymer;
- Sulfonated Polyacrylic Acid Copolymer;
- Phosphinocarboxylic acid copolymer;