Disodium of 1-Hydroxy Ethylidene-1,1-Diphosphonic Acid (HEDP • Na₂)

CAS No. 7417-83-7 **CubleK2012 Dequest 2016BD**

Molecular Formula: C₂H₆O₇P₂Na₂ **Molecular weight**: 250

Structural Formula:

Properties:

HEDP•Na₂ is an organophosphonic acid corrosion inhibitor, it can chelate with Fe, Cu, and Zn ions, it can dissolve the oxidized materials, it has good scale and corrosion inhibition effects even under 250°C, it is stable under high pH value, not easy to be hydrolyzed, not easy to be decomposed under normal light and heat condition, its acid/alkaline and chloride oxidation tolerance are better than that of other organophosphonic acids. HEDP • Na2 can form six-ring chelating compounds with metal ions in water system, Ca²⁺ in particular. HEDP•Na₂ has good scale inhibition effects and obvious dissolution threshold effects. When used with other water treatment agents, the synergistic effects is better.

Specification:

items	index	
Appearance	Colorless to light yellow transparent liquid	White powder
Active component (HEDP) %	16.5min	74.0-79.0
Active component (HEDP•Na ₂) %	20.0min	89.8min
density (20°C) g/cm 3	1.12-1.22	
Fe ppm		35max
Phosphorous acid(PO ₃ ³ -th)%		3max
Dry weight loss, %		3-6
PH (1% water solution)	4.0-6.0	4.0-6.0

Usage:

HEDP•Na₂ is widely used in circulating cool water system, medium and low pressure boiler, oil field water pipelines as scale and corrosion inhibitor in fields such as electric power, chemical industry, metallurgy, fertilizer, etc.. In light woven industry, HEDP•Na₂ is used as detergent for metal and nonmetal. In dyeing industry, HEDP•Na₂ is used as peroxide stabilizer and dye-fixing agent; In non-cyanide electroplating, HEDP•Na₂ is used as chelating agent.

Package and Storage:

For liquid: Normally In 250kg net Plastic Drum, IBC drum can also be used as required. Storage for ten months in room shady and dry place.

For solid: inner liner polyethylene (PE) bag, outer plastic woven bag, or confirmed by clients. Storage for ten months in room shady and dry place.

Safety Protection:

Weak Acidity, Avoid contact with eye and skin, once contacted, flush with water.