TECHNICAL DATA SHEET

NAME OF COMMODITY: 1-HYDROXYETHYLIDENE -1,1-DIPHOSPHONIC ACID
CAS NO.: 2809-21-4
MOLECULAR FORMULA: $C_2H_8O_7P_2$
MOLECULAR WEIGHT: 206

TESTS	SPECIFICATIONS
Appearance	CLEAR COLORLESS TO PALE YELLOW LIQUID, FREE FROM FOREIGN MATTER
Active Acid (%)	60 MIN
Phosphorous acid as PO3 3- (%)	1.5 MAX
Phosphoric acid as PO4 3- (%)	0.4 MAX
Chloride as Cl - (ppm w/w)	100 MAX
Sequestrant value (CaCO3) mg/g as product at pH 11-12	500 MIN
pH (1% solution)	2.0 MAX
Density at 20°C, g/cm3	1.440 MIN
Iron content (Fe ppm)	15.0 MAX
Colour	20 MAX

 APPLICATION：

HEDP can chelate with Fe, Cu, Al, Zn etc. metal ions and form stable chelating compounds and dissolve the oxidized materials on metals' surfaces. It is soluble with water, shows excellent scale and corrosion inhibition effects under temperature 200°C and has good chemical stability under high pH value, hard to be hydrolyzed , and hard to be decomposed under ordinary light and heat conditions. Its acid/alkali and chlorine oxidation tolerance are better than that of other organophosphorus acids (salt). HEDP can react with metal ions in water system to form hexa-element chelating complex, with calcium ion in particular. Therefore, HEDP has good antiscale and visible threshold effects. When built together with other water treatment chemicals, it shows good synergistic effects.

The crystal powder of HEDP with high content, suitable for usage in winter and freezing districts. Because of its high purity, it can be used as cleaning agent in electronic fields and as additives in daily chemicals

RECOMMENDED USE：

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

PACKING: IN 250KG PER DRUM.

SHELF LIFE: 12 MONTHS