



TECHNICAL DATA SHEET

NAME OF COMMODITY: 1-HYDROXYETHYLIDENE -1,1-DIPHOSPHONIC ACID

CAS NO.: 2809-21-4

MOLECULAR FORMULA: C₂H₈O₇P₂

MOLECULAR WEIGHT: 206

| TESTS | SPECIFICATIONS |
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| Appearance | WHITE CRYSTAL POWDER |
| Active Acid (as HEDP.H ₂ O%) | 98.0 MIN |
| Active Acid (as HEDP %) | 90.0 MIN |
| Phosphorous acid as PO ₃ 3- (%) | 0.8 MAX |
| Phosphoric acid as PO ₄ 3- (%) | 0.5 MAX |
| Chloride as Cl - (ppm w/w) | 100 MIN |
| Iron content (Fe ppm) | 20.0 MAX |
| pH (1% solution) | 2.0 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 antiscaling 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 25KG OR 1000KG NET BAG.

SHELF LIFE: 12 MONTHS