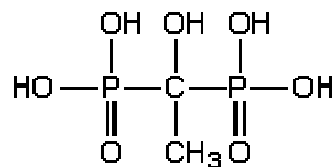


SolQuest® 2010 1-Hydroxy Ethylidene-1,1-Diphosphonic Acid (HEDP)

CAS NO.: 2809-21-4

Structural Formula:

Molecular Formula: C₂H₈O₇P₂



Physico-Chemical Properties:

Appearance	Clear, Colorless to pale yellow aqueous solution
Active content (HEDP)%	58.0-62.0
Phosphorous acid (as PO ₃ ³⁻)%	2.0 max
Phosphoric acid (as PO ₄ ³⁻)%	0.8 max
Chloride (as Cl-)%	0.02 max
PH(1% water solution)	2.0 max
Density (20°C) g/cm ³	1.40 min
Fe, mg/L	20.0 max
Ca sequestration (mg CaCO ₃ /g)	500.0 min

General Information

HEDP is an organophosphoric acid corrosion inhibitor. It can chelate with Fe, Cu, and Zn ions to form stable chelating compounds. It can dissolve the oxidized materials on these metals' surfaces. HEDP shows excellent scale and corrosion inhibition effects under temperature 250°C. HEDP 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 organophosphoric 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 solid state of HEDP is crystal powder, 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.

Safety Protection

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