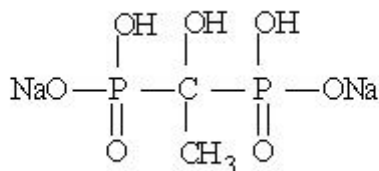


## Disodium Salt of 1-Hydroxy Ethylidene-1,1-Diphosphonic Acid (HEDP.Na<sub>2</sub>)



<b>CAS No.</b>	7414-83-7	<b>EINECS No.</b>	700-903-6
<b>Molecular Formula</b>	C <sub>2</sub> H <sub>6</sub> O <sub>7</sub> P <sub>2</sub> Na <sub>2</sub>	<b>Molecular Weight</b>	250

### Structural Formula



### Product Features

HEDP.Na<sub>2</sub> is based on the disodium salt form of HEDP (1-Hydroxy Ethylidene-1,1-Diphosphonic Acid).

HEDP.Na<sub>2</sub> is an excellent organophosphonic acid corrosion inhibitor.

HEDP.Na<sub>2</sub> can chelate with Fe, Cu, and Zn ions. HEDP.Na<sub>2</sub> can dissolve the oxidized materials.

HEDP.Na<sub>2</sub> has good scale and corrosion inhibition effects even under 250°C.

HEDP.Na<sub>2</sub> 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.Na<sub>2</sub> can form six-ring chelating compounds with metal ions in water system, Ca<sup>2+</sup> in particular.

HEDP.Na<sub>2</sub> has good scale inhibition effects and obvious dissolution threshold effects. When used with other Water Treatment Chemicals, the synergistic effects is better.

### Technical Specification

Items	Index	
Appearance	Colorless to light yellow transparent liquid	White powder
Active component(HEDP), %	16.5 min	74.0-79.0
Active content(HEDP·Na <sub>2</sub> ), %	20.0 min	89.8 min
Density (20°C), g/cm <sup>3</sup>	1.12-1.22	--
Fe, mg/L	--	20 max
Phosphorous acid (PO <sub>3</sub> <sup>3-</sup> ), %	--	3 max
Moisture, %	--	3.0-6.0
PH (1% water solution)	4.0-6.0	4.0-6.0

## Applications & Usage

HEDP.Na<sub>2</sub> 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.Na<sub>2</sub> is used as detergent for metal and nonmetal.



In dyeing industry, HEDP.Na<sub>2</sub> is used as peroxide stabilizer and dye-fixing agent.

In non-cyanide electroplating, HEDP.Na<sub>2</sub> is used as chelating agent.


## Scale & Corrosion Inhibition Performance

CaCO <sub>3</sub> inhibition	CaSO <sub>4</sub> inhibition	Ca <sub>3</sub> (PO <sub>4</sub> ) <sub>2</sub> inhibition	BaSO <sub>4</sub> inhibition	CaF <sub>2</sub> inhibition
Excellent	Poor	Very Good	Good	Good
Calcium Tolerance	Iron Control	Sequestration	Steel corrosion inhibition	--
Poor	Yes	Good	Very Good	--

## Package & Storage

HEDP.Na <sub>2</sub> Solid		HEDP.Na <sub>2</sub> Liquid			
25kg Bag	Bulk Bag	25L Drum	200L Drum	1000L IBC	ISO Tank
					
Once contacted with eye and skin, flush with plenty of clean water.					

## Hazard & Safety Precaution

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

## Alternative Name / Synonyms

- Disodium Etidronate Hydrate;
- Disodium dihydrogen bisphosphonate (1-hydroxyethylidene)bisphosphonate

## HEDP.Na<sub>2</sub> related products

- Disodium Salt of 1-Hydroxy Ethylidene-1,1-Diphosphonic Acid
- Tetra Sodium Salt of 1-Hydroxy Ethylidene-1,1-Diphosphonic Acid (HEDP•Na<sub>4</sub>)
- 1-Hydroxy Ethylidene-1,1-Diphosphonic Acid (HEDP)