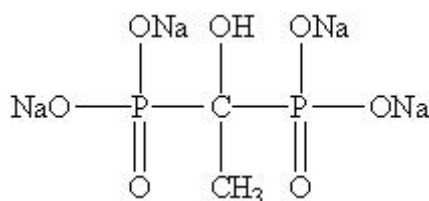


Tetra Sodium Salt of 1-Hydroxy Ethylidene-1,1-Diphosphonic Acid (HEDP.Na₄)



CAS No.	3794-83-0	EINECS No.	223-267-7
Molecular Formula	C ₂ H ₄ O ₇ P ₂ Na ₄	Molecular Weight	294

Structural Formula



Product Features

HEDP.Na₄ is the tetra sodium salt of HEDP. HEDP.Na₄ has excellent scale inhibition for calcium carbonate (CaCO₃) and chlorine stability.

HEDP•Na₄ solid form soluble in water, easily deliquescence, suitable for use in winter and freezing districts. It is a kind of organophosphonic acid scale and corrosion inhibitor, can form stable complex with Fe, Cu and Zn ions. HEDP.Na₄ solid can dissolve the oxides on metal surface, it has good scale and corrosion inhibition effect under 250°C.

Technical Specification

Items	Index		
	White powder		Colorless to yellowish transparent liquid
Active content (HEDP), %	56.0 min	60.0 min	20.3-21.7
Active content (HEDP•Na ₄), %	80.0 min	85.0 min	29.0-31.0
Fe, mg/L	35.0 max	35.0 max	20.0 max
Moisture, %	15.0 max	10.0 max	--
Density (20°C), g/cm ³	--	--	1.26-1.36
pH (1% water solution)	10.0-12.0	10.0-12.0	10.0-12.0

Applications & Usage

HEDP·Na₄ is widely used as scale and corrosion inhibitor in circulating water system, medium and low pressure boiler, oil field water pipelines, Household and I&I (industrial & institutional) cleaners, detergents.

In light woven industry, HEDP.Na₄ is used as detergent for metal and nonmetal.

In dyeing industry, HEDP.Na₄ is used as peroxide stabilizer and dye-fixing agent;

In non-cyanide electroplating, HEDP.Na₄ is used as chelating agent.


Scale & Corrosion Inhibition Performance

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

Package & Storage

HEDP.Na ₄ Solid		HEDP.Na ₄ 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.Na₄ related products

- Disodium Salt of 1-Hydroxy Ethylidene-1,1-Diphosphonic Acid
- 1-Hydroxy Ethylidene-1,1-Diphosphonic Acid (HEDP)
- Disodium Salt of 1-Hydroxy Ethylidene-1,1-Diphosphonic Acid (HEDP•Na₂)
- Potassium salt of 1-HydroxyEthylidene-1,1-Diphosphonic Acid (HEDP•Kx)