

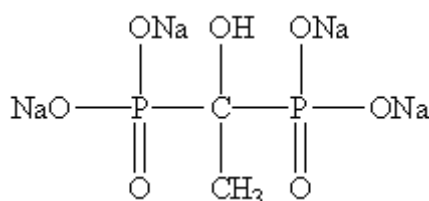
# Tetra Sodium Salt of 1-Hydroxy Ethylidene-1,1-Diphosphonic Acid (HEDP•Na<sub>4</sub>)

CAS No. 29329-71-3 (x-Na), 3794-83-0 (4-Na)    Synonyms: Tetrasodium etidronate

Molecular Formula: C<sub>2</sub>H<sub>4</sub>O<sub>7</sub>P<sub>2</sub>Na<sub>4</sub>

Molecular weight: 294

Structural Formula:



## Properties:

[HEDP•Na<sub>4</sub>](#) is the sodium salt of [HEDP](#), [HEDP•Na<sub>4</sub>](#) is an good scale inhibitor for calcium carbonate, it can be used in low pressure boiler water system, circulating water system, industrial and municipal cleaning water system and swimming pool.

The solid [HEDP•Na<sub>4</sub>](#) is white powder, 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, it can dissolve the oxides on metal surface, it has good scale and corrosion inhibition effect under 250°C.

[HEDP•Na<sub>4</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>4</sub>](#) is used as detergent for metal and nonmetal. In dyeing industry, [HEDP•Na<sub>4</sub>](#) is used as peroxide stabilizer and dye-fixing agent; In non-cyanide electroplating, [HEDP•Na<sub>4</sub>](#) is used as chelating agent.

## Specification:

Items	Index		
Appearance	White powder		Colorless to yellowish transparent liquid
Active content (HEDP), %	56.0 min	60.0 min	20.3-21.7
Active content (HEDP•Na <sub>4</sub> ), %	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 <sup>3</sup>	--	--	1.26-1.36
pH (1% water solution)	10.0-12.0	10.0-12.0	10.0-12.0

## Package and Storage:

Liquid: 200L plastic drum,IBC(1000L),customers' requirement.

Solid: 25kg/bag,customers' requirement. Storage for ten months in shady room and dry place.

## Safety Protection:

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

## Synonyms:

Tetrasodium (1-hydroxyethylidene)bisphosphonate

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