

Certificate of Analysis

Product Name: Hydroxyethylidene Diphosphonic Acid (HEDP)

Product Information

Product Number: HEDP-CAS2509214-202502 Batch Number: HEDP-2025022001 Brand: SIGALD
CAS Number: 2509-21-4 MDL Number: MFCD00002140 Formula: $C_2H_8O_7P_2$ Formula Weight:
206.03 g/mol Quality Release Date: 20 FEB 2025

Test Item	Specification (Industrial Standard)	Result	Test Method
Appearance	Colorless to pale yellow transparent liquid, no mechanical impurities	Colorless transparent liquid	Visual Inspection
Purity (by Titration)	$\geq 99.0\%$	99.5%	Potentiometric Titration (GB/T 26324-2010)
Phosphorous Acid (H_3PO_3) Content	$\leq 0.3\%$	0.12%	Iodometric Titration
Phosphoric Acid (H_3PO_4) Content	$\leq 0.5\%$	0.25%	Ammonium Molybdate Spectrophotometry
pH Value (25°C, 1% Aqueous)	1.0-2.0	1.5	pH Meter
Density (25°C)	1.45-1.55 g/cm ³	1.49 g/cm ³	Pycnometer Method
Chloride (Cl^-) Content	$\leq 0.01\%$	0.004%	Silver Nitrate Titration
Heavy Metals (Pb)	$\leq 0.0005\%$	0.0001%	Atomic Absorption Spectrometry (AAS)

This batch of product has been tested in accordance with industrial standards for Hydroxyethylidene Diphosphonic Acid and meets all specified requirements. It is qualified for use. Issue Date: 20 FEB 2025