

# Britequest HEDP

## 1-Hydroxy Ethylidene-1, 1-Di Phosphonic acid

CAS nr: 2809-21-4  
EINECS nr: 220-552-8

### Product information

---

Synonyms: HEDPA, OEDP, Etidronic acid, Hydroxyethylidene Diphosphonic acid; 1-Hydroxy-1,1-Ethanediy l ester;Oxyethylidenediphosphonic Acid;  
Phosphonic acid,[[bis[2-[bis(phosphonomethyl)amino]ethyl]amino]methyl]-; C<sub>2</sub>H<sub>8</sub>O<sub>7</sub>P<sub>2</sub>

Britequest HEDP and the lower priced Britequest ATMP are the most common of phosphonic acids. Britequest HEDP is an excellent chelating agent, inhibiting scaling right from the start. Especially effective on ions of Fe, Cu, Zn. At temperatures up to 250°C, Britequest HEDP is anti-corrosive. It is chemically stable up to high pH values and hard to hydrolyse. Compared to Britequest ATMP, Britequest HEDP has better compatibility with Chlorine.

Applications are industrial cooling water, boilers and oil refineries. In the dye industrie, because of its high purity, Britequest HEDP is used to treat metal surfaces. Normally the 60% solution is used. The solid Britequest HEDP-98% is suitable in regions with temperatures below zero.

### Commercial

---

Packaging 60% solution:  
25liter jerrycans, 250kg (200liter) drums, 1250kg (1000liter) IBC, 24mt ISO tank container (bulk)  
Packaging 98% crystals:  
25kg bags  
Lead time solution in IBC's:  
1 week  
Lead time other packaging:  
6 weeks  
Lead time powder:  
8 weeks

## Product specifications

	60%-solution	98%-crystals
Appearance	pale yellow transparent liquid	white crystal powder
Active content (as acid), %	58.0 - 62.0	98.0 min
Phosphorous acid (PO <sub>3</sub> <sup>3-</sup> ), %	1.0 max	0.8 max
Phosphoric acid (PO <sub>4</sub> <sup>3-</sup> ), %	0.6 max	0.5 max
Acetic acid, %	0.5 max	-
Colour APHA (Hazen)	30.0 max	-
Chloride (as Cl), ppm	100.0 max	50.0 max
Iron (as Fe), ppm	10.0 max	5 max
pH (1% solution)	2.0 max	2.0 max
Density (20°C), g/cm <sup>3</sup>	1.43 - 1.47	-
Ca sequestration, mg CaCO <sub>3</sub> /g	500.0 min	-

[Change specifications](#)

### Technical

Anti-scaling dosage: 1-10 mg/l. Anti corrosion dosage: 10-50 mg/l. Detergent dosage: 1000-2000mg/l.

Britequest is often used together with poly carboxylic acid.

In more extreme conditions of high alkaline, high water hardness, high temperature, high salt concentrations and high turbidity, it is advised to use specialty products such as Britequest PAPEMP.

For even higher chlorine stability, Britequest PBTC is preferred.

© Copyright Sirius International

The information in this datasheet is to the best of our knowledge, true and accurate. Any recommendations or suggestions are made without warranty or guarantee since the conditions of use are beyond our control.