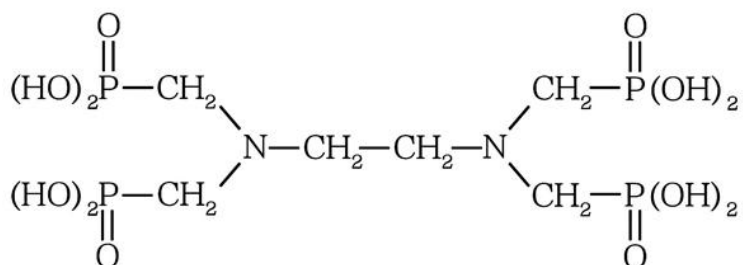


Ethylene Diamine Tetra (Methylene Phosphonic Acid) EDTMPA (Solid)



CAS No.	1429-50-1	EINECS No.	215-851-5
Molecular Formula	C ₆ H ₂₀ N ₂ O ₁₂ P ₄	Molecular Weight	436.13

Structural Formula



Product Features

EDTMPA is a broad spectrum scale inhibitor. Particularly effective against calcium sulphate and barium sulphate. EDTMPA is a powerful complexing agent with a high calcium tolerance. EDTMPA is an excellent chelant and also has good chemical and thermal stability. EDTMPA has strong metal ion chelating capacity, The complex constant with Cu is the largest in all chelating agents including EDTA. EDTMPA can replace EDTA for chelating agent at almost any situation.

EDTMPA is a kind of high-pure grade reagent and innocuous. EDTMPA can be used as detergent in semiconductor chip to prepare integrated circuit, as carrying agent for radioelement in medical industry, and as agent for inspection and therapy. EDTMPA is used in detergents as an incrustation control agent and for the stabilization of bleach components. EDTMPA is also used in oilfield formulations and as a peroxide bleach stabilization agent in textile auxiliaries. EDTMPA has a high dispersing power for ceramic slurries and retards setting in building materials.

EDTMPA is white crystal powder at room temperature, with melting point 215-217°C, hard to be dissolved in water, the solubility is less than 5% at room temperature, easy dissolved in ammonia.

Technical Specification

Parameter	Standard
Appearance	White crystal powder
Active content, %	96.0 min
Total phosphonic acid (as PO_4^{3-}), %	82.0 min
Chloride (Cl^-), %	0.1 max
Moisture, %	2.0 max
Fe, mg/L	5 max
pH (1% water solution)	2.0 max



Scale & Corrosion Inhibition Performance

CaCO_3 inhibition	CaSO_4 inhibition	$\text{Ca}_3(\text{PO}_4)_2$ inhibition	CaC_2O_4 inhibition	BaSO_4 inhibition
Good	Very Good	Very Good	Good	Very Good
Calcium tolerance	Iron control	Sequestration	Steel corrosion inhibition	
Good	Yes	Excellent	Very Good	

Package & Storage

EDTMPA Solid		
25kg Bag	Bulk Bag	Fiber drum
		
Storage for 10 months in shady room and dry place.		

Hazard & Safety Precaution

Hazard Information	Safety Precaution
 Corrosive, Class 8, UN 3265	
Once contacted with eye and skin, flush with plenty of clean water.	

Alternative Name / Synonyms

- EDTMP
- EDTPO
- EDTMP(A)
- Ethylene Diamine Tetra (Methylene Phosphonic Acid)