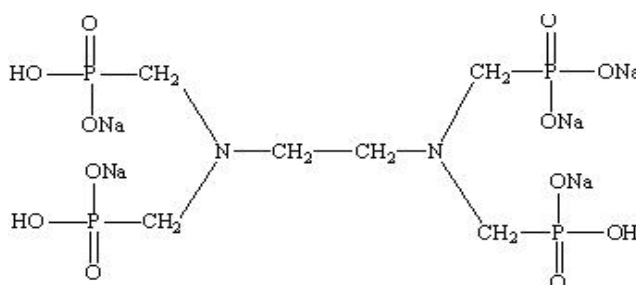


## Pentasodium Salt of Ethylene Diamine Tetra (Methylene Phosphonic Acid) (EDTMP.Na<sub>5</sub>)



<b>CAS No.</b>	7651-99-2	<b>EINECS No.</b>	231-615-4
<b>Molecular Formula</b>	C <sub>6</sub> H <sub>15</sub> O <sub>12</sub> N <sub>2</sub> P <sub>4</sub> Na <sub>5</sub>	<b>Molecular Weight</b>	546.13

### Structural Formula



### Product Features

EDTMP.Na<sub>5</sub> is pentasodium salt of EDTMPA. EDTMP.Na<sub>5</sub> is a cathodic corrosion inhibitor. EDTMP.Na<sub>5</sub> shows excellent scale inhibition effects to calcium sulfate and barium sulfate.

EDTMP.Na<sub>5</sub> is also recommended for applications in peroxide bleach stabilization and scale control in detergent formulations, Industrial and Institutional (I&I) cleaners, geothermal water treatment, oilfield scale control, cement hardening retardation.

### Applications & Usage

EDTMP.Na<sub>5</sub> can be used as scale and corrosion inhibitor for circulating water and boiler water system, chelating agent in non-cyanide electroplating, water-softening agent in dyeing industry, etc.





### Scale & Corrosion Inhibition Performance

CaCO <sub>3</sub> inhibition	CaSO <sub>4</sub> inhibition	Ca <sub>3</sub> (PO <sub>4</sub> ) <sub>2</sub> inhibition	CaC <sub>2</sub> O <sub>4</sub> inhibition	BaSO <sub>4</sub> inhibition
Good	Very Good	Very Good	Good	Very Good
Calcium Tolerance	Iron Control	Sequestration	Steel corrosion inhibition	
Good	Yes	Excellent	Very Good	



## Technical Specification

Items	Index	
Appearance	Amber transparent liquid	White powder
Active content (EDTMP•Na <sub>5</sub> ), %	30.0-32.5	81.4 min
Active content (EDTMPA), %	24.0-26.0	65.0 min
Chloride (Cl <sup>-</sup> ), %	2.0 max	2.0 max
Density (20℃), g/cm <sup>3</sup>	1.25 min	--
Fe, mg/L	20 max	20 max
PH(1% water solution)	6.0-8.0	6.0-8.0

## Package & Storage

EDTMP•Na <sub>5</sub> Liquid			
25L Drum	200L Drum	1000L IBC	ISO Tank
			
Storage for ten months in shady room and dry place.			

## Hazard & Safety Precaution

Hazard Information	Safety Precaution
Not regulated	  
Once contacted with eye and skin, flush with plenty of clean water.	

## Alternative Name / Synonyms

- EDTMP pentasodium salt;
- Ethylenediamine tetra(methylenephosphonic acid) pentasodium salt;
- pentasodium trihydrogen [ethane-1,2-diylbis[nitrilobis(methylene)]]tetrakisphosphonate;
- Pentasodium ethylenediamine tetramethylene phosphonate;
- Phosphonic acid, 1,2-ethanedylbisnitrilobis(methylene)tetrakis-, pentasodium salt;
- Ethylenediamine-N,N,N",N"-tetrakis-(methylenephosphonic acid) pentasodiums;
- Pentasodium Salt of Ethylene Diamine Tetra (Methylene Phosphonic Acid) (EDTMPNa5);
- Pentasodium Salt of Ethylene Diamine Tetra (Methylene Phosphonic Acid)
- Salts of Phosphonates ( Antiscalants, Corrosion Inhibitors and Chelating Agents )