

## Pentasodium Salt of Ethylene Diamine Tetra (Methylene Phosphonic Acid)

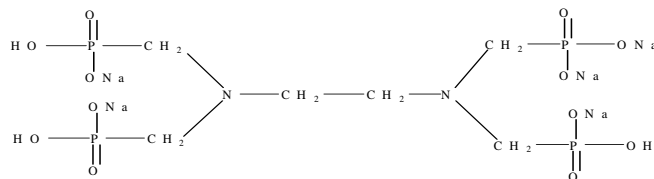
### (EDTMP·Na<sub>5</sub>)

[CAS No.] 7651-99-2

**Molecular Formula:** C<sub>6</sub>H<sub>15</sub>O<sub>12</sub>N<sub>2</sub>P<sub>4</sub>Na<sub>5</sub>

**Molecular weight:** 546.13

**Structural Formula:**



#### Properties:

EDTMP·Na<sub>5</sub> is a neutral solid product. It is nitrogenous organic polyphosphonic acid, which is a part of cathodic corrosion inhibitor. EDTMP·Na<sub>5</sub> can be fully dissolved in water, innocuous and none pollution to environment, has good chemical stability and thermal tolerance. EDTMP·Na<sub>5</sub> has good scale inhibition property under temperature 200°C. EDTMP·Na<sub>5</sub> can dissociate into 8 positive-negative ions, thus can chelate with more than two metal ions to form more than two polymer reticulation complex, the complex can be quickly dissolved in water to destroy the normal crystallization of calcium scale. EDTMP·Na<sub>5</sub> shows better scale inhibition effects to calcium sulfate and barium sulfate.

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.

The solid state EDTMP·Na<sub>5</sub> is slightly easy to deliquescence, convenient in transportation and suitable for usage in winter and freezing districts.

#### Specification:

items	index	
Appearance	Amber transparent liquid	White powder
Active content (EDTMP · 5Na)%	30.0-32.5	81.4min
Active content (EDTMPA)%	24.0-26.0	65.0min
Chloride (Cl <sup>-</sup> ) %	2.0max	2.0 max
Density (20°C) g/cm <sup>3</sup>	1.25max	-
Fe ppm	20max	20 max
PH (1% water solution)	6.0~8.0	6.0~8.0

#### Package and Storage:

For liquid: Normally In 250kg net Plastic Drum, IBC drum can also be used as required. Storage for ten months in room shady and dry place.

For solid: inner liner polyethylene (PE) bag, outer plastic woven bag, or confirmed by clients. Storage for one year in room shady and dry place.