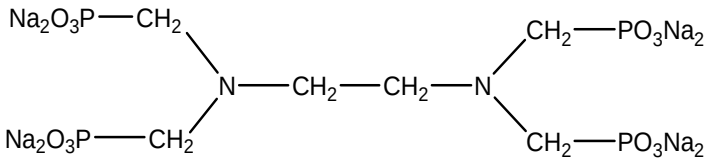
Ethylene Diamine Tetra (Methylene Phosphonic Acid) Sodium (EDTMPS)

CAS No. 1429-50-1 **Dequest: 2040**

Molecular Formula: C6H12O12N2P4Na8 **Molecular weight: 612.13**

Structural Formula:



Properties:

EDTMPS is nitrogenous organic polyphosphonic acid, a part of cathodic corrosion inhibitor.Its corrosion inhibition is 3~5 times better than that of inorganic polyphosphate. It can be fully dissolved in water, innocuous and none pollution to environment, has good chemical stability and thermal tolerance. It shows excellent scale inhibition ability under temperature 200℃. It can dissociate into 8 positive-negative ions, thus can chelate with many metal ions to form polymer reticulation complex, to destroy the normal crystallization of calcium scale. EDTMPS shows better antiscale effects to calcium sulfate and barium sulfate.

Specification:

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Appearance	Clear yellow to umber transparent liquid
Active component（EDTMPS）%	30.0min
Organic phosphonic acid (as PO_4^{3-}) %	10.0min
Phosphorous acid（as PO_3^{3-}）%	5.0max
Phosphoric acid （asPO_4^3）%	1.0max
Ph value（1% water solution）	9.5-10.5
Density （20℃）g/cm^3	1.25min
Chloride (Cl^-) %	3.0max

Usage:

EDTMPS can be used as corrosion inhibitor in circulating cool water system and boiler water. It is a chelating agent in non-cyanogen electroplating industry and a water-softening agent in printing & dyeing industry. When used alone, 2~10mg/L is preferred. When built with HPMA by ratio ETDMP:HPMA=1:3, it can be used for low pressure boiler. It can also be built with BTA, PAAS and zinc salt.

Package and Storage:

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