

Diethylene Triamine Penta (Methylene Phosphonic Acid) (DTPMPA)

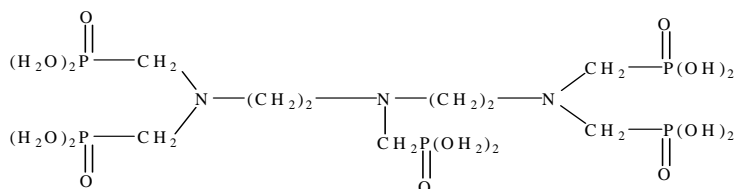
CAS No 15827-60-8

Dequest 2060

Molecular Formula: $C_9H_{28}O_{15}N_3P_5$

Molecular weight: 573.2

Structural Formula:



Properties:

DTPMPA is innocuous, easy to be dissolved in acid solution. DTPMPA has excellent scale and corrosion inhibition and good thermal tolerance ability. DTPMPA can inhibit the scale formation of carbonate, sulfate and phosphate. On situation of alkali environment and high temperature (above 210 °C) DTPMPA has better scale and corrosion inhibition effect than other organophosphines.

Specification:

items	index
Appearance	Brown transparent liquid
Active acid %	48.0-52.0
Phosphorous acid (as PO_3^{3-}) %	3.0max
chloride (as Cl) %	12-17
Density (20°C) g/cm^3	1.35-1.45
pH (1% solution)	2.0
Fe ppm	35max

Usage:

DTPMPA can be used as scale and corrosion inhibitor in circulating cool water system and boiler water, and especially in alkali circulating cool water system without additional pH regulation, It can also be used in oilfield refill water, cool water and boiler water with high concentration of barium carbonate. When used alone, little scale sediment is found even none of dispersant is used.

DTPMPA can also be used as peroxide stabilizer, chelating agent in woven & dyeing industry, pigment dispersant, microelement's carrying agent in fertilizer and concrete modifier. In addition, DTPMPA is used in papermaking, electroplating, acid cleaning and cosmetics.

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.

Safety Protection:

Acidity, Avoid contact with eye and skin, once contacted, flush with water.