

SolQuest® 2054 Hexamethylene diamine tetra (methylene

phosphonic acid) K₆HDTMPA

CAS NO.: 38820-59-6(X-6) Structural Formula:

53473-28-2(6-K)

Molecular Formula: $C_{10}H_{22}N_2O_{12}P_4K_6\\$

$$K_2O_3P$$
— CH_2 CH_2 — PO_3K_2 N — $(CH_2)_6$ — N

Physico-Chemical Properties:

Appearance	Colorless to yellowish transparent liquid
Active component (as acid) %	21.2-24.6
Active component (as salt) %	31.0-36.0
Total phosphoric acid(PO ₄ ³⁻)%	16.8 min
Chloride (as Cl-)%	4.0 max
PH(1% water solution)	6.0-8.0
Density (20°C) g/cm³	1.21-1.31
Fe, mg/L	35.0 max

General Information

HMDTMPA•K6 is soluble in water, it is a good scale inhibitor for calcium sulfate, suitable for use in situation of high pH value and high alkaline. HMDTMPA•K6 can be used for water treatment in boiler and RO membrane treatment.

HMDTMPA•K6 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, HMDTMPA•K6 is used in papermaking, electroplating, acid cleaning and cosmetics.

Safety Protection

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

