

# HYDROLYZED POLYMALEIC ANHYDRIDE (HPMA)

### **SYNONYMS:**

(Z)-2-Butenedioic acid homopolymer; Hydrolyzed polymaleic anhydride; HPMA; PMA

**CAS No:** 26099-09-2

MOLECULAR FORMULA: (C4H4O4)n

**OTHER TRADE NAME:** Acumer 1050

## **PROPERTIES:**

HPMA is a low molecular weight polymeride, with average molecular weight 400-800. No toxicity, soluble in water, high chemical and thermal stability, decomposed temperature above 330 degree. HPMA has obvious threshold effect under high temperature (350degree) and high pH(8.3) level, suitable to be used in alkaline water system or built with agents. It has good scale inhibition against carbonate and phosphate scales under temperature 300degree with effective time as long as 100 hours. Due to its good scale inhibition and high temperature tolerance properties, In addition, HPMA has good corrosion inhibition effect when used together with zinc salt.

# **SPECIFICATION:**

Appearance Pale yellow to amber transparent liquid

Solid content% 48.0 min
Bromine value Mg/g 80.0 max
Average molecular wt 1.2 min
pH(1% solution) 2.0-3.0

#### **USAGE:**

HPMA is widely used in desalination plant of flash vaporization equipment, low pressure boiler, steam locomotive, crude oil evaporation, petroleum pipeline, and industrial circulating cool water systems. It is usually used together with organic phosphonate at dosage of 1-15ppm for circulating cool water system oilfield fill water, crude oil dewatering and low-pressure boilers. HPMA can also used as additives for cement, cooling water treatment, boilers, evaporators, RO membranes, secondary oil recovery.

### **PACKING:**

240Kgs Net Drum.