

Cosutin Industrial CO., Limited

UNIT B, 10/F LEE MAY BUILDING 788-790 NATHAN ROAD
MONGKOK, KOWLOON, H.K
TEL.: +852 21395855 FAX: +852 81673777

THPO

GENERAL DESCRIPTION

THPO chemical name is tris(hydroxymethyl) phosphine oxide, is a new reactive organic phosphorus flame retardant. The product is colorless or pale yellow liquid. THPO has a high phosphorus content, contains an active hydroxymethyl, is excellent at Hydrolysis resistance. It can be used for the production of polyether polyols as initiator, or as an additive to Polyether polyols then react with MDI. Polyether polyols made from THPO has low smoke, low toxicity, high carbon residue, and good compatibility, which could be used in polyurethane foam to increase the oxygen index to 28 more, flame retardant rating to UL94- V-0 level and the combustion heat release rate is slow. THPO is a stable and long lasting flame retardant, it does not affect the mechanical properties of the material. THPO has also been used as a medicine intermediate and lubricant.

SPECIFICATIONS

Appearance :	Colourless or Pale yellow
Purity, %	≥96%
Phosphorous content (%)	≥21.5
Moisture (%)	≤1.5%
Formaldehyde (ppm)	≤300
Sulfate ion (ppm)	≤500
Density (g/cm ³ , 20°C)	1.42-1.45
Viscosity (mPa·s, 20°C)	3500-4000
pH.....	7-8
Hydroxyl value (mgKOH/g)	330-380
Viscosity (mPa·s, 20°C)	2000-3000

PROPERTIES

THPO

CAS Number: 1067-12-5
Colour: Colourless or Pale yellow
Appearance: Colourless or Pale yellow liquid
Chemical name: Tri (hydroxymethyl) phosphine oxide
Chemical formula: (CH₂OH)₃PO
pH: 7-8
Melting point: N/A
Boiling point: 504.9°C at 760mmHg
Flash point: 259.2 °C
Ignition temperature: N/A
Lower explosion limit: no data available
Upper explosion limit: no data available
Vapour pressure: 2.6E-12mmHg at 25°C
Density: 1.42~1.45 g/cm³ at 20 °C
Refractive Index: 1.49

Handling method and safety information

THPO is liquid at ordinary temperature. Read the Material Safety Data Sheet (MSDS) before use. Dangerous or hazardous reactions do not take place under normal conditions.

Packaging specifications

plastic bucket