

Functional Chemical

Dimethylolpropionic Acid

DESCRIPTION

Dimethylolpropionic acid (DMPA; CAS No. 4767-03-7) is a multifunctional hindered diol. Its molecule contains one tertiary carboxyl group and two primary hydroxyl groups; due to its combination of hydrophilic and cross-linking properties, it is widely used as a chain extender and internal emulsifier, serving as a core raw material in the production of waterborne polyurethanes, waterborne coatings, and adhesives.

CHEMICAL
NAME

2,2-bis(hydroxymethyl)propionic acid

KEY
FEATURES

- Odorless and hygroscopic.
- It features a unique neopentyl structure, imparting excellent heat resistance and light stability to the polymer.
- It is readily soluble in water, methanol, dimethylformamide (DMF), etc., slightly soluble in acetone, and sparingly soluble in benzene.

TYPICAL
PROPERTIES

Property	Range(or value)
Appearance	white crystalline powder
Purity, %	≥99%
Hydroxyl value	810~860 mg KOH/g
Acid value, mg KOH/g	405~425
Melting point, °C	approx 180
Water content, Wt %	≤0.3%
Ash content, Wt %	≤0.02%

APPLICATION

- Polyurethane dispersions
- Photographic chemicals
- Waterborne alkyds and polyesters
- Other waterborne chemicals

STORAGE
AND
HANDLING

- 25 kg/bag, 500kg / 750kg /1000 kg on pallet
- Store products in tightly closed original containers at 5-40℃
- Shelf life: 12 months from delivery date
- According to non-dangerous goods transport