

Methyl methacrylate (MMA) is an organic compound with the formula $\text{CH}_2=\text{C}(\text{CH}_3)\text{COOCH}_3$. This colorless liquid, the methyl ester of methacrylic acid (MAA) is a monomer produced on a large scale for the production of poly(methyl methacrylate) (PMMA).

Applications

- Textile processing : Sizing
- Leather technology : Binding, Tanning agent
- Ion-exchange resins : Water treatment
- Cosmetics : Thickening agent, Suspending agent
- Oil-well drilling : Drilling-mud additive, Anti-caking agent
- Paper industry : Filler-retention aid
- Industrial-waste treatments : Suspending agent, Flocculating agent
- Transportation : Skid-proof tires
- Rubber industry : Creaming of latex
- Agriculture : Solid conditioners
- Others : Coating, Adhesive

Advantage

- Hardness •Flexibility •Clarity •Color compatibility •Toughness •Weatherability
- Internal plasticization

Specification

Purity wt% 99.8 (Min.)

Color (APHA) - 5 (Max.)

Water ppm 500 (Max.)

Acid (as MAA) ppm 50 (Max.)

Inhibitor (Topanol-A) ppm 5±1

Property

Molecular Weight g/mol 100.12

Chemical Formular - $\text{CH}_2=\text{C}(\text{CH}_3)\text{COOCH}_3$

Specific Gravity g/cm³ 0.943

Boiling Point °C 100.3

Freezing Point °C -48.2

Heat of polymerization kcal/kg 137.3

Solubility (water) g/100g 1.56 (at 20°C)

Flash Point (Closed cup) °C 10

Ignition Point °C 421

Limits of Flammability vol % 2.12~12.5