



YOUNG'S CORPORATION

242-8 YANGJAE-DONG, SEOCHO-GU, SEOUL, 137-132, KOREA

TEL: 82-2-555-1040

FAX: 82-2-2057-0399

E-mail: export@youngscorp.com

Website: www.youngscorp.com

MMA(Methyl methacrylate)

MMA

MMA is the colorless, transparent liquid with the smell of ester, and it is a little miscible in water, but very soluble in any organic solvents. It can be readily polymerization into methacryl polymer by light, heat, radiation and peroxidized materials and so on. The Honam petrochemical corp.'s MMA process, which has started to operate commercially from 2001, includes the direct oxidation of isobutylene extracted from mixed C4, and esterification step, therefore, the process is eco-friendly because of reducing the amount of waste compared to the ACH method (used aceton and hydrogen cyanide)

	Item	Unit		Properties
Specification	Color	APHA	JIS K 6716	5 max
	Specific Gravity	d ²⁰ ₄	ASTM D4052-91	0.9420~0.9460
	Purity	wt%	JIS K 6716	99.8 min
	Water	wt%	JIS K 6716	0.05 max
	Free Acid as MMA	wt%	JIS K 6716	0.005 max
	Inhibitor	Topanol,ppm		5±0.5
Physical Properties	Appearance	visual		transparent
	Molecular Weight	g/mol		100
	Refractive Index	N ²⁰ _D		1.4152
	Viscosity	CPS.20°C		0.56
	Melting Point	°C		-48
	Specific Heat	cal/g/°C		0.45
	Heat of Polymerization	Kcal/mol		13.0
	Boiling Point	°C		100
	Water Solubility	g/100mL(at 20°C)		1.5
	Flash Point	°C(O.C.)		8
	Flammability	°C		421
	Toxicity	mg/kg(acute oral LD50. rats)		8000
	Homo-Polymer	°C		105

*** Remark: The figures indicated on the table are standard values**

MMA major usage	Acryl polymer, MMA-butadiene-styrene (MBS) polymer, the raw material of latex, optical products, components of automobile, materials of construction, artificial materials, instrument of light, signboard, daily necessities, paint materials, adhesive
Caution	<ul style="list-style-type: none">• Keep it in cool and well vented place, in air-tight container, and keep away from heat, light and direct ray• Isolated from strong oxidized agent, strong base, strong acid, reducing agent, amines• To avoid sparking, be cautious when you open or close MMA container, and use the needed equipments• When you deal with MMA, use the protect equipments