

## Methacrylates Specifications

	Methyl Methacrylate MMA		Butyl Methacrylate BMA		Glacial Methacrylic Acid GMAA	
Formula	$\begin{array}{c} \text{O CH}_3 \\    \quad   \\ \text{H}_3\text{-C-O-C-C=CH}_2 \end{array}$		$\begin{array}{c} \text{O CH}_3 \\    \quad   \\ \text{H}_3\text{C(CH}_2)_3\text{O-C-C=CH}_2 \end{array}$		$\begin{array}{c} \text{O CH}_3 \\    \quad   \\ \text{HO-C-C=CH}_2 \end{array}$	
Formula Weight	100		142		86	
CAS Registry	80-62-6		97-88-1		79-41-4	
	Specification	Typical	Specification	Typical	Specification	Typical
Assay, % min	99.80	99.9	99.60	99.8	99.00	99.6
Acidity, % max	0.005	0.003	0.0025	0.002	—	—
Water, % max	0.05	0.03	0.05	0.02	0.30	0.14
Color, APHA	10	5	10	5	25	10
Inhibitor*, ppm	9–12 45–55 22–28 54–66	10**** 50 HQ 25 HQ 60	8–15	10	225–275	250
Refractive Index, n <sub>25D</sub>		1.4118		1.4215		1.4288
Specific Gravity, 25°C/15.6°C		0.939		0.889		1.015
Density, lbs/US gal		7.8		7.4		8.5
Flash Point**, °C °F		8(S) 47		49(PM) 120		67(Tag) 152
Freezing Point, °C		-48		-50		14
Boiling Point, °C 760mm		101		163		161
Viscosity, cps		0.53		0.92		1.3
Tg, °C		105		20		185
Recommended Storage Life,*** years max		1		1		1

\* Inhibitor is MEHQ (monomethyl ether of hydroquinone or p-methoxyphenol) except where HQ (hydroquinone) is indicated.

\*\* Flash Point Method: S = Setaflash  
PM = Pensky-Martens Closed Cup  
Tag = Tag Closed Cup

\*\*\* Storage Life: Refer to MSDS for guidelines on individual monomers.

\*\*\*\* If using MMA 10 ppm MEHQ, recommended storage life is 6 months.