

## Surface Energy Data for PEMA: Poly(ethyl methacrylate), CAS #9003-42-3

Source <sup>(a)</sup>	Mst. Type <sup>(b)</sup>	Data <sup>(c)</sup>	Comments <sup>(d)</sup>
Lee, 1968 <sup>(131)</sup>	Critical ST	$\gamma_c = 33 \text{ mJ/m}^2$ ; no temp cited	Test liquids: water, glycerol, formamide, alcohols, and long-chain polyglycols.
Kamagata, 1974 <sup>(301)</sup>	Critical ST	$\gamma_c = 31.5 \text{ mJ/m}^2$ ; 20°C	Test liquids not known.
Kutsch, 1993 <sup>(102)</sup>	Critical ST	$\gamma_c = 33 \text{ mJ/m}^2$ ; no temp cited	Test liquids not known.
Iyengar, 1996 <sup>(258)</sup>	Contact angle	$\gamma_s = 33.6 \text{ mJ/m}^2$ ; no temp cited	Test liquids not known.
Kwok, 2000 <sup>(57)</sup>	Contact angle	$\gamma_c = 33.6 \text{ mJ/m}^2$ ; no temp cited	Four unknown test liquids; surface tension calculated by equation of state approach.
Wu, 1971 <sup>(41)</sup>	From polymer melt	$\gamma_s = 35.9 \text{ mJ/m}^2$ ; 20°C	Direct measurement of polymer melt extrapolated to 20°C. $M_v = 5200$ .
Wu, 1968 <sup>(182)</sup>	Calculated	$\gamma_s = 33 \text{ mJ/m}^2$ ; 20°C	Calculated from molecular constitution.
Sewell, 1971 <sup>(193)</sup>	Calculated	$\gamma_s = 29.0 \text{ mJ/m}^2$ ; no temp cited	Calculated from parachor and cohesive energy.
Pritykin, 1986 <sup>(199)</sup>	Calculated	$\gamma_s = 35.3 \text{ mJ/m}^2$ ; no temp cited	Calculated from cohesion parameters and monomer refractometric characteristics, equation 1.
Pritykin, 1986 <sup>(199)</sup>	Calculated	$\gamma_s = 35.6 \text{ mJ/m}^2$ ; no temp cited	Calculated from cohesion parameters and monomer refractometric characteristics, equation 2.
Surface-tension.de, 2007 <sup>(110)</sup>	Unknown	$\gamma_s = 35.9 \text{ mJ/m}^2$ ( $\gamma_s^d = 26.9$ , $\gamma_s^p = 9.0$ ); 20°C	No details available.

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