

Surface Energy Data for PMA: Poly(methyl acrylate), CAS #25087-26-7

Source ^(a)	Mst. Type ^(b)	Data ^(c)	Comments ^(d)
Lee, 1967 ⁽¹⁸³⁾	Critical ST	$\gamma_c = 41 \text{ mJ/m}^2$; no temp cited	Test liquids: water, glycerol, formamide, alcohols, and long-chain polyglycols.
Wu, 1971 ⁽⁴¹⁾	Critical ST	$\gamma_c = 35 \text{ mJ/m}^2$; 20°C	Test liquids not known.
Partington, 1960 ⁽²⁰⁹⁾	From polymer melt	$\gamma_s = 41.0 \text{ mJ/m}^2$ ($\gamma_s^d = 40.0$, $\gamma_s^p = 1.0$); 20°C	Direct measurement of polymer melt extrapolated to 20°C. $M_w = 25,000$.
Wu, 1971 ⁽⁴¹⁾	From polymer melt	$\gamma_s = 41.0 \text{ mJ/m}^2$ ($\gamma_s^d = 37.8$, $\gamma_s^p = 3.2$); 20°C	Direct measurement of polymer melt extrapolated to 20°C; polarity calculated from interfacial tension with PE by harmonic mean. $M_w = 25,000$.
Wu, 1971 ⁽⁴¹⁾	From polymer melt	$\gamma_s = 40.1 \text{ mJ/m}^2$; 20°C	Direct measurement of polymer melt extrapolated to 20°C.
Wu, 1989 ⁽²⁷³⁾	From polymer melt	$\gamma_s = 41.0 \text{ mJ/m}^2$ ($\gamma_s^d = 30.8$, $\gamma_s^p = 10.2$); 20°C	Direct measurement of polymer melt extrapolated to 20°C. $M_n = 25,000$.
Wu, 1989 ⁽²⁷³⁾	From polymer melt	$\gamma_s = 42.7 \text{ mJ/m}^2$ ($\gamma_s^d = 33.7$, $\gamma_s^p = 9.0$); 20°C	Direct measurement of polymer melt extrapolated to 20°C. Molecular weight not specified.
Lee, 1968 ⁽¹³¹⁾	Calculated	$\gamma_s = 39 \text{ mJ/m}^2$; no temp cited	Calculated from glass temperature of 279K.
Wu, 1968 ⁽¹⁸²⁾	Calculated	$\gamma_s = 40 \text{ mJ/m}^2$; 20°C	Calculated from molecular constitution.
Sewell, 1971 ⁽¹⁹³⁾	Calculated	$\gamma_s = 41.1 \text{ mJ/m}^2$; no temp cited	Calculated from parachor and cohesive energy.
Pritykin, 1986 ⁽¹⁹⁹⁾	Calculated	$\gamma_s = 35.1 \text{ mJ/m}^2$; no temp cited	Calculated from cohesion parameters and monomer refractometric characteristics, equation 1.
Pritykin, 1986 ⁽¹⁹⁹⁾	Calculated	$\gamma_s = 38.0 \text{ mJ/m}^2$; no temp cited	Calculated from cohesion parameters and monomer refractometric characteristics, equation 2.