## Surface Energy Data for PnBMA: Poly(*n*-butyl methacrylate), CAS # 25608-33-7

Source <sup>(a)</sup>	Mst. Type <sup>(b)</sup>	Data©	Comments <sup>(d)</sup>
Wu, 1968 <sup>(182)</sup>	Critical ST	$\gamma_c = 32 \text{ mJ/m}^2$ ; 20°C	Test liquids not known.
Wu, 1971 <sup>(29)</sup>	Contact angle	$\theta_{W}^{Y} = 91^{\circ}; 20^{\circ}C$	
Wu, 1971 <sup>(29)</sup>	Contact angle	$\gamma_s = 33.3 \text{ mJ/m}^2 (\gamma_s^{d} = 31.3, \gamma_s^{p} = 2.0); 20^{\circ}\text{C}$	Test liquids: water and diiodomethane, by geometric mean equation.
Wu, 1971 <sup>(29)</sup>	Contact angle	$\gamma_s = 34.6 \text{ mJ/m}^2 (\gamma_s^{d} = 28.4, \gamma_s^{p} = 6.2); 20^{\circ}\text{C}$	Test liquids: water and diiodomethane, by harmonic mean equation.
Chapman, 1995 <sup>(259)</sup>	Contact angle	$\gamma_s = 28.8 \text{ mJ/m}^2$ ; no temp cited	Test liquids not known.
Kwok, 2000 <sup>(166)</sup>	Contact angle	$\gamma_{\rm c}$ = 28.8 mJ/m <sup>2</sup> ; no temp cited	Re-calculated by equation of state method from data produced by Kwok, 1998 <sup>(168)</sup> .
Kwok, 2000 <sup>(<u>166</u>)</sup>	Contact angle	$\gamma_{\rm c}$ = 28.5 mJ/m²; no temp cited	Re-calculated by alternate equation of state method from data produced by Kwok, 1998 <sup>(168)</sup> .
Wu, 1970 <sup>(35)</sup>	From polymer melt	$\gamma_{\rm c} = 31.3 \text{ mJ/m}^2 (\gamma_{\rm c}^{\rm d} = 25.0, \gamma_{\rm c}^{\rm p} = 6.3); 20^{\circ}\text{C}$	Direct measurement of polymer melt extrapolated to 20°C.
Wu, 1970 <sup>(35)</sup>	From polymer melt	$\gamma_{s} = 31.2 \text{ mJ/m}^{2} (\gamma_{s}^{d} = 26.3, \gamma_{s}^{p} = 4.9); 20^{\circ}\text{C}$	Measurement by pendant drop of polymer melt extrapolated to $20^{\circ}$ C; polarity calculated from interfacial tension with PE by harmonic mean. M <sub>2</sub> = 37,000.
Wu, 1971 <sup>(29)</sup>	From polymer melt	$\gamma_{s}=31.2~mJ/m^{2}~(\gamma_{s}^{\rm ~d}=25.5,~\gamma_{s}^{\rm ~p}=5.7);~20^{\rm o}C$	Measurement by pendant drop of polymer melt extrapolated to 20°C; polarity calculated from interfacial tension with PE by geometric mean equation.
Wu, 1968 <sup>(182)</sup>	Calculated	$\gamma_{\rm c} = 32 \text{ mJ/m}^2$ ; 20°C	Calculated from molecular constitution.
Wu, 1970 <sup>(35)</sup>	Calculated	$\gamma_{c} = 38.1 \text{ mJ/m}^{2}; 20^{\circ}\text{C}$	Calculated from parachor and molecular weight.
Wu, 1982 <sup>(18)</sup>	Calculated	$\gamma_{\rm s} = 34.0 \text{ mJ/m}^2$ ; 20°C	Calculated from cohesive energy density and solubility parameters.
Van Ness, 1992 <sup>(186)</sup>	Calculated	$\gamma_{\rm c} = 30.8 \text{ mJ/m}^2$ ; 20°C	Calculated molten surface tension value, extrapolated to 20°C.
Pritykin, 1986 <sup>(199)</sup>	Calculated	$\gamma_{c} = 36.5 \text{ mJ/m}^{2}$ ; no temp cited	Calculated from cohesion parameters and monomer
v ·		•5	refractometric characteristics, equation 1.
Pritykin, 1986 <sup>(199)</sup>	Calculated	$\gamma_{s}$ = 35.3 mJ/m²; no temp cited	Calculated from cohesion parameters and monomer refractometric characteristics, equation 2.

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