Surface Energy Data for PVA: Poly(vinyl acetate), CAS #9003-20-7

Source[a]	Mst. Type[b]	Data[c]	Comments[d]
Wu, 1968[182]	Critical ST	γ_c = 36 mJ/m^2; no temp cited	Test liquids not known.
Crocker, 1969[111]	Critical ST	γ_c = 37 mJ/m^2; no temp cited	Test liquids not known.
Wu, 1971[41]	Critical ST	γ_c = 33 mJ/m^2; 20°C	Test liquids not known.
McCafferty, 2000[217]	Contact angle	θ_W^Y = 60.6°; no temp cited	Surface cleaned with light methanol wipe.
Roe, 1978[223]	Contact angle	γ_s = 42.9 mJ/m^2 (γ_s^d = 27.4, γ_s^p = 15.4); no temp cited	Test liquids not known.
McCafferty, 2000[217]	Contact angle	γ_s = 44.5 mJ/m^2 (γ_s^{LW} = 42.6, γ_s^{AB} = 1.9, γ_s^+ = 0.04, γ_s^- = 22.3); no temp cited	Test liquids: water, diiodomethane, formamide, ethylene glycol, and glycerin; acid-base analysis. Cleaned with methanol wipe.
Wu, 1969[28]	From polymer melt	γ_s = 36.5 mJ/m^2 (γ_s^d = 24.5, γ_s^p = 12.0); 20°C	Measurement by pendant drop of polymer melt extrapolated to 20°C; polarity calculated from interfacial tension with PE by harmonic mean. M_w = 11,000.
Wu, 1970[35]	From polymer melt	γ_s = 36.3 mJ/m^2 (γ_s^d = 23.2, γ_s^p = 13.1); 20°C	Direct measurement of polymer melt extrapolated to 20°C.
Wu, 1971[29]	From polymer melt	γ_s = 36.5 mJ/m^2 (γ_s^d = 23.6, γ_s^p = 12.9); 20°C	Measurement by pendant drop of polymer melt extrapolated to 20°C; polarity calculated from interfacial tension with PE by geometric mean equation.
Lee, 1968[131]	Calculated	γ_s = 40 mJ/m^2; no temp cited	Calculated from glass temperature of 301K.
Wu, 1968[182]	Calculated	γ_s = 36 mJ/m^2; 20°C	Calculated from molecular constitution.
Wu, 1970[35]	Calculated	γ_s = 38.8 mJ/m^2; 20°C	Calculated from parachor and molecular weight.
Sewell, 1971[193]	Calculated	γ_s = 41.1 mJ/m^2; no temp cited	Calculated from parachor and cohesive energy.
Wu, 1982[18]	Calculated	γ_s = 39.1 mJ/m^2; 20°C	Calculated from cohesive energy density and solubility parameters.
Van Ness, 1992[186]	Calculated	γ_s = 37.0 mJ/m^2; 20°C	Calculated molten surface tension value, extrapolated to 20°C.
Pritykin, 1986[199]	Calculated	γ_s = 35.7 mJ/m^2; no temp cited	Calculated from cohesion parameters and monomer refractometric characteristics, equation 1.
Pritykin, 1986[199]	Calculated	γ_s = 38.0 mJ/m^2; no temp cited	Calculated from cohesion parameters and monomer refractometric characteristics, equation 2.
Surface-tension.de, 2007[110]	Unknown	γ_s = 36.5 mJ/m^2 (γ_s^d = 25.1, γ_s^p = 11.4); 20°C	No details available.