Surface Energy Data for PVF: Poly(vinyl fluoride), CAS # 24981-14-4

Source[a]	Mst. Type[b]	Data[c]	Comments[d]
Ellison, 1954[8]	Critical ST	γ_c = 28 mJ/m^2, 20°C	Various test liquids.
Wu, 1971[29]	Contact angle	θ_W^Y = 80°, 20°C	
Moshonov, 1980[118]	Contact angle	θ_W^Y = 85°; no temp cited	Measured 60 secs. after application of water droplet; surface cleaned with isopropanol at 60°C and rinsed with methanol.
Vargha-Butler, 1985[180]	Contact angle	θ_W^A = 88.6°; 20°C	
Wu, 1971[29]	Contact angle	γ_s = 36.7 mJ/m^2 (γ_s^d = 32.0, γ_s^p = 4.7); 20°C	Test liquids: water and diiodomethane, by geometric mean equation.
Wu, 1971[29]	Contact angle	γ_s = 38.4 mJ/m^2 (γ_s^d = 27.3, γ_s^p = 11.1); 20°C	Test liquids: water and diiodomethane, by harmonic mean equation.
Kitazaki, 1972[191]	Contact angle	γ_s = 43.5 mJ/m^2 (γ_s^d = 42.3, γ_s^p = 1.2); no temp cited	Various test liquids; original results split polar component into hydrogen- and non-hydrogen bonding parameters.
Wu, 1979[45]	Contact angle	γ_c = 37.5 mJ/m^2, 20°C	Test liquids not known; calculated by the equation of state method.
Brewis, 1981[261]	Contact angle	γ_s = 36.7 mJ/m^2 (γ_s^d = 36.7, γ_s^p = 0.0); no temp cited	Test liquids not known.
Vargha-Butler, 1985[180]	Contact angle	γ_c = 29.4 mJ/m^2; 20°C	Test liquids not known; calculated by the equation of state method.
Lloyd, 1995[218]	Contact angle	γ_s = 36.7 mJ/m^2 (γ_s^{LW} = 34.8, γ_s^{AB} = 1.9, γ_s^+ = 0.2, γ_s^- = 4.5); no temp cited	Test liquids not known; acid-base analysis. Tedlar.
Lloyd, 1995[218]	Contact angle	γ_s = 39.0 mJ/m^2 (γ_s^{LW} = 38.0, γ_s^{AB} = 1.0, γ_s^+ = 0.02, γ_s^- = 13.2); no temp cited	Test liquids not known; acid-base analysis.
Morra, 1999[134]	Contact angle	γ_s = 36.8 mJ/m^2 (γ_s^{LW} = 34.1, γ_s^{AB} = 2.7, γ_s^+ = 8.3, γ_s^- = 0.2); no temp cited	Test liquids not known; acid-base analysis based on reference values for water of γ^+ = 48.5 mJ/m^2 and γ^- = 11.2 mJ/m^2.
Uschold, 1999[211]	Contact angle	γ_s = 38 mJ/m^2; no temp cited	
Chang, 2000[162]	Contact angle	γ_s = 35.2 mJ/m^2; no temp cited	
Kwok, 2000[166]	Contact angle	γ_c = 35.7 mJ/m^2; no temp cited	Re-calculated by equation of state method from data produced by Ellison, 1954[8].
Wu, 1971[29]	From polymer melt	γ_s = 37.5 mJ/m^2 (γ_s^d = 31.6, γ_s^p = 5.9); 20°C	Direct measurement of polymer melt extrapolated to 20°C.
Lee, 1968[131]	Calculated	γ_s = 41 mJ/m^2; no temp cited	Calculated from glass temperature of 323K.
Wu, 1968[182]	Calculated	γ_s = 29 mJ/m^2; 20°C	Calculated from molecular constitution.
Van Krevelen, 1976[85]	Calculated	γ_s = 32.5 mJ/m^2; no temp cited	Calculated from parachor parameter.
Vargha-Butler, 1985[180]	Calculated	γ_s = 28.8 mJ/m^2; no temp cited	Calculated from sedimentation volume.