

Surface Energy Data for PCTFE: Poly(chlorotrifluoroethylene), CAS #9002-83-9

Source ^(a)	Mst. Type ^(b)	Data ^(c)	Comments ^(d)
Fox, 1952 ⁽¹²⁾	Critical ST	$\gamma_c = 31 \text{ mJ/m}^2$; 20°C	Test liquids not known.
Lee, 1968 ⁽¹³¹⁾	Critical ST	$\gamma_c = 31 \text{ mJ/m}^2$; no temp cited	Test liquids: water, glycerol, formamide, alcohols, and long-chain polyglycols.
Wu, 1971 ⁽²⁹⁾	Contact angle	$\theta_W^Y = 90^\circ$; 20°C	
Bee, 1993 ⁽⁴⁾	Contact angle	$\theta_W^A = 104^\circ$, $\theta_W^R = 67^\circ$, $d\theta_W = 37^\circ$; no temp cited	
Bee, 1993 ⁽²¹⁴⁾	Contact angle	$\theta_W^A = 104^\circ$, $\theta_W^R = 77^\circ$, $d\theta_W = 27^\circ$; no temp cited	
Wu, 1971 ⁽²⁹⁾	Contact angle	$\gamma_s = 27.5 \text{ mJ/m}^2$ ($\gamma_s^d = 23.9$, $\gamma_s^p = 3.6$); 20°C	Test liquids: water and diiodomethane, by geometric mean equation.
Wu, 1971 ⁽²⁹⁾	Contact angle	$\gamma_s = 30.1 \text{ mJ/m}^2$ ($\gamma_s^d = 21.6$, $\gamma_s^p = 8.5$); 20°C	Test liquids: water and diiodomethane, by harmonic mean equation.
Wu, 1979 ⁽⁴⁵⁾	Contact angle	$\gamma_c = 32.1 \text{ mJ/m}^2$; 20°C	Test liquids not known, calculated by the equation of state method.
Kwok, 2000 ⁽¹⁶⁶⁾	Contact angle	$\gamma_c = 28.9 \text{ mJ/m}^2$; no temp cited	Re-calculated by equation of state method from data produced by Fox, 1952 ⁽¹²⁾ .
Schonhorn, 1966 ⁽³⁹⁾	From polymer melt	$\gamma_s = 30.9 \text{ mJ/m}^2$ ($\gamma_s^d = 22.2$, $\gamma_s^p = 8.7$); 20°C	Measurement by capillary height of polymer melt extrapolated to 20°C; polarity calculated from interfacial tension with PE by harmonic mean. $M_n = 1280$.
Wu, 1971 ⁽²⁹⁾	From polymer melt	$\gamma_s = 31.1 \text{ mJ/m}^2$; 20°C	Direct measurement of polymer melt extrapolated to 20°C.
Good, 1964 ⁽¹⁶⁾	Calculated	$\gamma_s = 38.0 \text{ mJ/m}^2$; 20°C	Estimated from molecular constants, using $u = 1.2$ debyes.
Lee, 1968 ⁽¹³¹⁾	Calculated	$\gamma_s = 26 \text{ mJ/m}^2$; no temp cited	Calculated from glass temperature of 318K.
Wu, 1968 ⁽¹⁸²⁾	Calculated	$\gamma_s = 31 \text{ mJ/m}^2$; 20°C	Calculated from molecular constitution.