

Surface Energy Data for FEP: Fluorinated ethylene propylene, CAS # 25067-11-2

Source ^(a)	Mst. Type ^(b)	Data ^(c)	Comments ^(d)
Sperati, 1989 ⁽²²²⁾	Critical ST	$\gamma_c = 17.8\text{-}18.6 \text{ mJ/m}^2$; no temp cited	Test liquids not known.
Markgraf, 2005 ⁽⁶²⁾	Critical ST	$\gamma_c = 18\text{-}22 \text{ mJ/m}^2$; no temp cited	Test liquids not known.
Petke, 1969 ⁽²³⁴⁾	Contact angle	$\theta_W^A = 108^\circ$; no temp cited	
Dwight, 1974 ⁽⁵²⁾	Contact angle	$\theta_W^A = 109^\circ$, $\theta_W^R = 93^\circ$, $d\theta_W = 16^\circ$; no temp cited	
Westerdahl, 1974 ⁽⁶³⁾	Contact angle	$\theta_W^Y = 103^\circ$, no temp cited	Commercial grade film, thickness 5 mils.
Triolo, 1983 ⁽¹⁸⁹⁾	Contact angle	$\theta_W^R = 96^\circ$; no temp cited	Data estimated from graph. Fully hydrated sample immersed in water; interface with advancing, submerged octane bubble.
Egitto, 1990 ⁽⁶⁵⁾	Contact angle	$\theta_W^Y = 110^\circ$, no temp cited	
Li, 1992 ⁽¹⁷⁶⁾	Contact angle	$\theta_W^Y = 111.6^\circ$; 20°C	
Pettit, 1992 ⁽³⁰⁵⁾	Contact angle	$\theta_W^Y = 103^\circ$; no temp cited	
Bee, 1993 ⁽²¹⁴⁾	Contact angle	$\theta_W^A = 115^\circ$, $\theta_W^R = 100^\circ$, $d\theta_W = 15^\circ$; no temp cited	
Good, 1998 ⁽¹⁵¹⁾	Contact angle	$\theta_W^A = 118.6^\circ$, $\theta_W^R = 105.2^\circ$, $d\theta_W = 13.4^\circ$; no temp cited	Surface rinsed with unspecified light hydrocarbon.
Angu, 2000 ⁽²²⁰⁾	Contact angle	$\theta_W^Y = 101.5^\circ$; no temp cited	Underwater captive bubble method, measured on concave tubular surface; technique A.
Angu, 2000 ⁽²²⁰⁾	Contact angle	$\theta_W^Y = 107.3^\circ$; no temp cited	Underwater captive bubble method, measured on concave tubular surface; technique B.
Ebnesajjad, 2006 ⁽²⁸⁰⁾	Contact angle	$\theta_W^Y = 101^\circ$, no temp cited	FEP-coated wire.
Chaudhury, 1984 ⁽²¹⁾	Contact angle	$\gamma_s = 17.9 \text{ mJ/m}^2$ ($\gamma_s^{LW} = 17.9$, $\gamma_s^{AB} = 0.0$, $\gamma_s^+ = 0.0$, $\gamma_s^- = 0.0$); 20°C	Test liquids: water, alpha-bromonaphthalene, diiodomethane, formamide, and glycerin; acid-base analysis.
Li, 1992 ⁽¹⁷⁶⁾	Contact angle	$\gamma_c = 15.9 \text{ mJ/m}^2$; 20°C	Test liquids not known; from advancing contact angles by equation of state method.
Kwok, 2000 ⁽¹⁶⁶⁾	Contact angle	$\gamma_c = 18.0 \text{ mJ/m}^2$; no temp cited	Re-calculated by equation of state method from data produced by Kwok, 1995 ⁽¹⁶⁷⁾ .
Kwok, 2000 ⁽¹⁶⁶⁾	Contact angle	$\gamma_c = 17.8 \text{ mJ/m}^2$; no temp cited	Re-calculated by alternate equation of state method from data produced by Kwok, 1995 ⁽¹⁶⁷⁾ .
Ebnesajjad, 2006 ⁽²⁸⁰⁾	Contact angle	$\gamma_s = 16.9 \text{ mJ/m}^2$ ($\gamma_s^d = 14.3$, $\gamma_s^p = 2.6$); no temp cited	Test liquids: water, diiodomethane, and xylene; FEP-coated wire, by geometric mean equation.
Ebnesajjad, 2006 ⁽²⁸⁰⁾	Contact angle	$\gamma_s = 22.7 \text{ mJ/m}^2$ ($\gamma_s^d = 17.3$, $\gamma_s^p = 5.4$); no temp cited	Test liquids: water, diiodomethane, and xylene; FEP-coated wire, by harmonic mean equation.
Andrews, 1973 ⁽⁵¹⁾	Unknown	$\gamma_s = 20.0 \text{ mJ/m}^2$ ($\gamma_s^d = 19.6$, $\gamma_s^p = 0.4$); no temp cited	Test details unknown; probably by contact angle.
Wu, 1982 ⁽⁴⁹⁾	Unknown	$\gamma_s = 18.8 \text{ mJ/m}^2$; 20°C	Measurement method not cited; PE molded under nitrogen.