

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

Source <sup>(a)</sup>	Mst. Type <sup>(b)</sup>	Data <sup>(c)</sup>	Comments <sup>(d)</sup>
Sperati, 1989 <sup>(222)</sup>	Critical ST	$\gamma_c = 17.8-18.6 \text{ mJ/m}^2$ ; no temp cited	Test liquids not known.
Markgraf, 2005 <sup>(62)</sup>	Critical ST	$\gamma_c = 18-22 \text{ mJ/m}^2$ ; no temp cited	Test liquids not known.
Petke, 1969 <sup>(234)</sup>	Contact angle	$\theta_W^A = 108^\circ$ ; no temp cited	
Dwight, 1974 <sup>(52)</sup>	Contact angle	$\theta_W^A = 109^\circ$ , $\theta_W^R = 93^\circ$ , $d\theta_W = 16^\circ$ ; no temp cited	
Westerdahl, 1974 <sup>(63)</sup>	Contact angle	$\theta_W^Y = 103^\circ$ , no temp cited	Commercial grade film, thickness 5 mils.
Triolo, 1983 <sup>(189)</sup>	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 <sup>(65)</sup>	Contact angle	$\theta_W^Y = 110^\circ$ , no temp cited	
Li, 1992 <sup>(176)</sup>	Contact angle	$\theta_W^Y = 111.6^\circ$ ; 20°C	
Pettit, 1992 <sup>(305)</sup>	Contact angle	$\theta_W^Y = 103^\circ$ ; no temp cited	
Bee, 1993 <sup>(214)</sup>	Contact angle	$\theta_W^A = 115^\circ$ , $\theta_W^R = 100^\circ$ , $d\theta_W = 15^\circ$ ; no temp cited	
Good, 1998 <sup>(151)</sup>	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 <sup>(220)</sup>	Contact angle	$\theta_W^Y = 101.5^\circ$ ; no temp cited	Underwater captive bubble method, measured on concave tubular surface; technique A.
Angu, 2000 <sup>(220)</sup>	Contact angle	$\theta_W^Y = 107.3^\circ$ ; no temp cited	Underwater captive bubble method, measured on concave tubular surface; technique B.
Ebnesajjad, 2006 <sup>(280)</sup>	Contact angle	$\theta_W^Y = 101^\circ$ , no temp cited	FEP-coated wire.
Chaudhury, 1984 <sup>(21)</sup>	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 <sup>(176)</sup>	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 <sup>(166)</sup>	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 <sup>(167)</sup> .
Kwok, 2000 <sup>(166)</sup>	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 <sup>(167)</sup> .
Ebnesajjad, 2006 <sup>(280)</sup>	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 <sup>(280)</sup>	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 <sup>(51)</sup>	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 <sup>(49)</sup>	Unknown	$\gamma_s = 18.8 \text{ mJ/m}^2$ ; 20°C	Measurement method not cited; PE molded under nitrogen.