

### Surface Energy Data for ABS: Acrylonitrile butadiene styrene, CAS #9003-56-9

Source <sup>(a)</sup>	Mst. Type <sup>(b)</sup>	Data <sup>(c)</sup>	Comments <sup>(d)</sup>
Markgraf, 2005 <sup>(62)</sup>	Critical ST	$\gamma_c = 35\text{-}42 \text{ mJ/m}^2$ ; no temp cited	Test liquids not known.
Fukuzawa, 1994 <sup>(113)</sup>	Contact angle	$\theta_W^Y = 89.7^\circ$ ; no temp cited	Contact angle measured after stabilizing for 15 secs.
Johansson, 2006 <sup>(138)</sup>	Contact angle	$\theta_W^A = 72^\circ$ ; no temp cited	Ultrasonically cleaned in isopropanol and rinsed with ethanol.
Fukuzawa, 1994 <sup>(113)</sup>	Contact angle	$\gamma_s = 35.2 \text{ mJ/m}^2$ ( $\gamma_s^{LW} = 39.4$ , $\gamma_s^{AB} = -4.3$ , $\gamma_s^+ = 0.8$ , $\gamma_s^- = 5.6$ ); no temp cited	Test liquids: water, formamide, and diiodomethane; acid-base analysis, calculated per Good and Van Oss <sup>(86)</sup> . Contact angles measured after stabilizing for 15 secs.
Fukuzawa, 1994 <sup>(113)</sup>	Contact angle	$\gamma_s = 40.5 \text{ mJ/m}^2$ ; no temp cited	Test liquids: water, formamide, and diiodomethane; acid-base analysis calculated by arithmetic and geometric means.
Schoff, 2003 <sup>(263)</sup>	Contact angle	$\gamma_s = 45 \text{ mJ/m}^2$ ( $\gamma_s^d = 37$ ; $\gamma_s^p = 8$ ); no temp cited	Test liquids not known, by geometric mean equation. Cylolac GPM 5600.
Schoff, 2003 <sup>(263)</sup>	Contact angle	$\gamma_s = 51 \text{ mJ/m}^2$ ( $\gamma_s^d = 40$ ; $\gamma_s^p = 11$ ); no temp cited	Test liquids not known, by geometric mean equation. Cyloloy C-2950.
Schoff, 2003 <sup>(263)</sup>	Contact angle	$\gamma_s = 42 \text{ mJ/m}^2$ ( $\gamma_s^d = 33$ ; $\gamma_s^p = 9$ ); no temp cited	Test liquids not known, by geometric mean equation. Dow Magnum 344HP.
Top Analytica <sup>(60)</sup>	Contact angle	$\gamma_s = 42 \text{ mJ/m}^2$ ( $\gamma_s^d = 35$ , $\gamma_s^p = 8$ ); no temp cited	Test liquids: water, diiodomethane, and ethylene glycol, by harmonic mean equation.
Top Analytica <sup>(60)</sup>	Contact angle	$\gamma_s = 42 \text{ mJ/m}^2$ ( $\gamma_s^{LW} = 39.4$ , $\gamma_s^{AB} = 2.6$ , $\gamma_s^+ = 1.0$ , $\gamma_s^- = 1.7$ ); no temp cited	Test liquids: water, diiodomethane, and ethylene glycol; acid-base analysis.
Top Analytica <sup>(60)</sup>	Contact angle	$\gamma_s = 38 \text{ mJ/m}^2$ ( $\gamma_s^d = 34$ , $\gamma_s^p = 4$ ); no temp cited	Test liquids: water, diiodomethane, and ethylene glycol, by harmonic mean equation. Prewashed with ionized water.