## Surface Energy Data for PnBMA: Poly(n-butyl methacrylate), CAS \# 25608-33-7

| Source ${ }^{()^{(1)}}$ | Mst. Type ${ }^{(b)}$ | Data ${ }^{(\underline{C})}$ | Comments ${ }^{(1)}$ |
| :---: | :---: | :---: | :---: |
| Wu, 1968 ${ }^{(182)}$ | Critical ST | $\gamma_{\mathrm{c}}=32 \mathrm{~mJ} / \mathrm{m}^{2} ; 20^{\circ} \mathrm{C}$ | Testliquids notknown. |
| Wu, 1971 ${ }^{(29)}$ | Contactangle | $\theta_{\text {w }}{ }^{\mathrm{Y}}=91^{\circ} ; 20^{\circ} \mathrm{C}$ |  |
| Wu, 1971 ${ }^{(29)}$ | Contactangle | $\gamma_{\mathrm{s}}=33.3 \mathrm{~mJ} / \mathrm{m}^{2}\left(\gamma_{\mathrm{s}}{ }^{\mathrm{d}}=31.3, \gamma_{\mathrm{s}}^{\mathrm{p}}=2.0\right) ; 20^{\circ} \mathrm{C}$ | Testliquids: waterand diiodomethane, by geometric mean equation. |
| Wu, 1971 ${ }^{(29)}$ | Contactangle | $\gamma_{\mathrm{s}}=34.6 \mathrm{~mJ} / \mathrm{m}^{2}\left(\gamma_{\mathrm{s}}{ }^{\mathrm{d}}=28.4, \gamma_{\mathrm{s}}^{\mathrm{p}}=6.2\right) ; 20^{\circ} \mathrm{C}$ | Testliquids: waterand diiodomethane, by harmonic mean equation. |
| Chapman, 1995(259) | Contactangle | $\gamma_{\mathrm{s}}=28.8 \mathrm{~mJ} / \mathrm{m}^{2}$; no temp cited | Testliquids notknown. |
| Kwok, 2000 ${ }^{(166)}$ | Contactangle | $\gamma_{\mathrm{c}}=28.8 \mathrm{~mJ} / \mathrm{m}^{2}$; no temp cited | Re-calculated by equation of state method from data produced by Kwok, 1998 ${ }^{1688}$. |
| Kwok, 2000 ${ }^{(166)}$ | Contactangle | $\gamma_{\mathrm{c}}=28.5 \mathrm{~mJ} / \mathrm{m}^{2}$; no temp cited | Re-calculated by altemate equation of state method from data produced by Kwok, 1998 ${ }^{1688}$. |
| Wu, 1970 ${ }^{(35)}$ | From polymermelt | $\gamma_{\mathrm{s}}=31.3 \mathrm{~mJ} / \mathrm{m}^{2}\left(\gamma_{\mathrm{s}}{ }^{\mathrm{d}}=25.0, \gamma_{\mathrm{s}}^{\mathrm{p}}=6.3\right) ; 20^{\circ} \mathrm{C}$ | Directmeasurementof polymermeltextrapolated to $20^{\circ} \mathrm{C}$. |
| Wu, 1970 ${ }^{(35)}$ | From polymermelt | $\gamma_{\mathrm{s}}=31.2 \mathrm{~mJ} / \mathrm{m}^{2}\left(\gamma_{\mathrm{s}}^{\mathrm{d}}=26.3, \gamma_{\mathrm{s}}^{\mathrm{p}}=4.9\right) ; 20^{\circ} \mathrm{C}$ | Measurementby pendantdrop of polymermeltextrapolated to $20^{\circ} \mathrm{C}$; polarity calculated from interfacial tension with PE by harmonic mean. $\mathrm{M}=37,000$. |
| Wu, 1971 ${ }^{(29)}$ | From polymermelt | $\gamma_{\mathrm{s}}=31.2 \mathrm{~mJ} / \mathrm{m}^{2}\left(\gamma_{\mathrm{s}}{ }^{\text {d }}=25.5, \gamma_{\mathrm{s}}^{\mathrm{p}}=5.7\right) ; 20^{\circ} \mathrm{C}$ | Measurementby pendantdrop of polymermeltextrapolated to $20^{\circ} \mathrm{C}$; polarity calculated from interfacial tension with PE by geometric mean equation. |
| Wu, 1968 ${ }^{(182)}$ | Calculated | $\gamma_{\mathrm{s}}=32 \mathrm{~mJ} / \mathrm{m}^{2} ; 20^{\circ} \mathrm{C}$ | Calculated from molecularconstitution. |
| Wu, 1970 ${ }^{(35)}$ | Calculated | $\gamma_{\mathrm{s}}=38.1 \mathrm{~mJ} / \mathrm{m}^{2} ; 20^{\circ} \mathrm{C}$ | Calculated from parachorand molecularweight. |
| Wu, 1982 ${ }^{(18)}$ | Calculated | $\gamma_{\mathrm{s}}=34.0 \mathrm{~mJ} / \mathrm{m}^{2} ; 20^{\circ} \mathrm{C}$ | Calculated from cohesive energy density and solubility parameters. |
| Van Ness, 1992 ${ }^{(186)}$ | Calculated | $\gamma_{\mathrm{s}}=30.8 \mathrm{~mJ} / \mathrm{m}^{2} ; 20^{\circ} \mathrm{C}$ | Calculated molten surface tension value, extrapolated to $20^{\circ} \mathrm{C}$. |
| Pritykin, 1986 ${ }^{(199)}$ | Calculated | $\gamma_{\mathrm{s}}=36.5 \mathrm{~mJ} / \mathrm{m}^{2}$; no temp cited | Calculated from cohesion parameters and monomer refractometric characteristics, equation 1. |
| Pritykin, 1986 ${ }^{(1099}$ | Calculated | $\gamma_{\mathrm{s}}=35.3 \mathrm{~mJ} / \mathrm{m}^{2}$; no temp cited | Calculated from cohesion parameters and monomer refractometric characteristics, equation 2. |

