



The 100/35/0.2 S_3N_4/Si probe with k in the 10-20 mN/m range is most suitable for contact mode studies. The example of such imaging of of polymer blend (PS/LDPE) is shown below. The height and lateral force images demonstrate a practically non-disturbed surface morphology of this blend, in which LDPE is a much softer ($E = 0.2\text{GPa}$) compared to PS ($E = 3\text{GPa}$). The lateral force contrast obviously differentiates surface locations occupied by the components and substrate. LDPE domains have been damaged when this sample was imaged with stiffer 200/35/0.6 probe.

Blend of Polystyrene and Low-Density Polyethylene (PS/LDPE) on Si substrate

