

## Enhanced Surface Properties of Polymer-Coated Absolu-Fit™ Nanoparticles

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Inorganic powder particles were coated by polymer layer using free-radical polymerization technique in order to give improved surface properties for make-up cosmetics formulation. The evidence of uniform coating on each individual particle was identified by TEM and FT-IR analysis. The physical surface property was analyzed by measuring the contact angle and the dispersion was tested in oil/water system. The degree of particle re-aggregation after ultra-sonication was monitored using light scattering method. It was found out to be able to control the softness and the skin-fitting capability of the Absolu-Fit™ powder by varying the thickness of polymer coating layer. The friction test of the make-up foundation prepared using the surface-modified powder showed the reduced roughness value and the increased skin-adhesion performance.