

The invention provides a method for preparing a titanium dioxide product, comprising the steps of: -providing a dispersion comprising titanium dioxide particles, wherein the dispersion contains from 50g/l to 600g/l TiO_2 ; and then, in any order, -applying an inorganic coating to the titanium dioxide particles, whilst maintaining colloidal stability before and/or during the coating step; -concentrating the dispersion, by subjecting the dispersion to the effects of cross-flow filtration and continuing the cross-flow filtration process until the dispersion is in a concentrated form that contains 800g/l or more TiO_2 ; so as to provide a titanium dioxide product in the form of a concentrated dispersion of coated particles. The concentrated dispersion of coated particles may optionally be dispersed within a vehicle to obtain a pigment product.