

Boosting Surface Resistance of Coatings and/or Personal Care products using Barrier Talc

Talc is an interesting filler to improve the surface resistance of your coatings or personal care products. In a collaboration project with Mondo Minerals, VLCI evaluated their talc against talc products from other sources. Superior barrier performance was achieved with the barrier-talc from Mondo. We can help you applying this in your formulations.

What is barrier-talc?

Mondo barrier-talcs rely on their superior crystal platy structure, and are therefore preferred for surface resistance: the flat and platy particles overlap, which helps preventing the water from going through the coating.

What are the benefits related to coatings?

From VLCI's research, it was shown that surface resistance of coatings is significantly improved by the platy and highly hydrophobic character of barrier-talc, especially against solvents. An effective dispersant selection and Optimum Dispersant Content studies were conducted, and allowed a major increase of the barrier-talc, while keeping the viscosity at a good level. Enhanced surface resistance was obtained with Mondo barrier-talc, compared to talc from other sources. The picture 1 below highlights these improvements: a water/ethanol mixture was put in contact of the films for 24 hours, after which the films were evaluated:

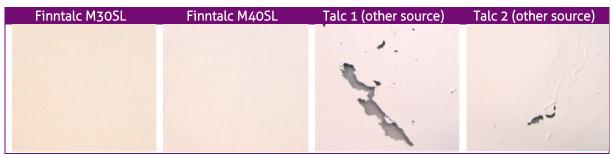


Figure 1: Water/ethanol mixture resistance of the film after 24 hours

What are the targeted product developments?

Indoor and outdoor paints and coatings, water-resistance personal and beauty care products, etc.

For whom will this be interesting?

Anyone interested in incorporating these barrier-talc products in coating formulations or personal and beauty care products, targeting superior surface resistance while optimizing final coating costs.