

# Boosting Barrier Properties of Protective Coatings 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 anti-corrosion performance: the flat and platy particles overlap, which helps preventing the water from going through the coating.

## What are the benefits related to protective coatings?

From VLCI's research, it was shown that barrier performance is significantly improved by the platy and highly hydrophobic character of barrier-talc. The study was performed via Electrochemical Impedance Spectroscopy (EIS), in epoxy coatings, based on the different talcs. The performance differences are highlighted in Figure 1 below:

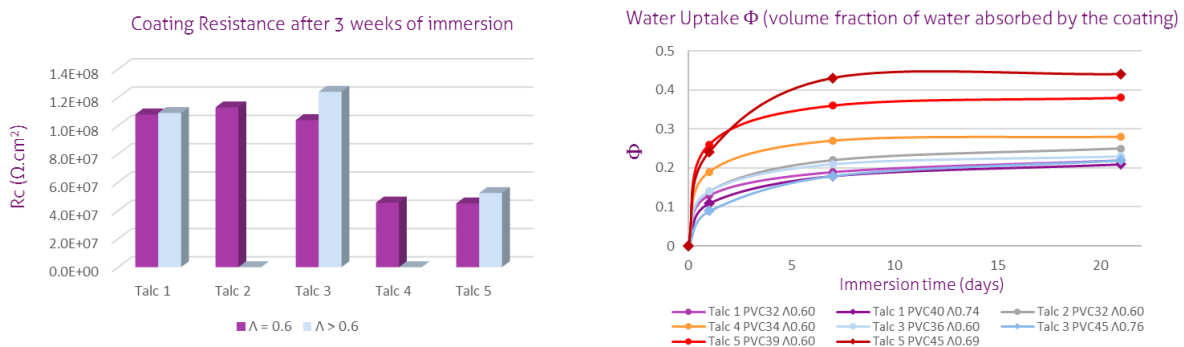


Figure 1: Barrier Performance in Epoxy Coatings (Talc 1,2 and 3 from Mondo Minerals)

## What are the targeted product developments?

From high PVC primers to low PVC topcoats, solvent- or water-based systems, we help you to effectively incorporate and assess barrier-talc in your final formulation.

## For whom will this be interesting?

Anyone interested in incorporating these barrier-talc products in protective coating formulations and targeting superior barrier performance while optimizing final coating costs.