

Alexander Krause

After his apprenticeship in 2007 as paint laboratory technician at Actega Rhenania for Can and Coil coatings, Alexander went on to further education as paint technician in Stuttgart. In 2020 he switched to KRONOS as Application specialist for Titanium Dioxide in Coatings & Inks. Up to this time, Alexander has built up extensive experience in the formulation of waterborne tinting pastes and Waterborne basecoats for OEM manufacturers.

TiO₂ & TMP: Understanding the Need for Change in Organic Treatments

The titanium dioxide (TiO₂) industry faces challenges in ensuring dispersibility and compatibility in various coatings, often using TMP (Trimethylolpropane) as an organic surface treatment. However, in 2019, TMP was classified as a "suspected reproductive toxicant Cat.2" due to concerns raised by its manufacturers. This prompted changes in its regulatory classification, potentially affecting its future use, especially in applications requiring certain ecolabels. Finland has requested a higher classification for TMP, which may result in further restrictions by 2026. In response, KRONOS developed TMP-free alternatives, e.g. KRONOS 2190, launched at the ECS 2023. This new product meets regulatory and safety requirements, ensures reliable production, and offers good performance in customer applications, maintaining similar properties in dispersion, tinting strength, and other key factors compared to the TMP-based product.