



OPTIMIZATION OF SOME COLOURED POWDER COATINGS BY USING ECOLOGICAL PIGMENTS

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Abstract

The actual trend in coating is to replace the classical paints systems that use lead and lead compounds, chrome yellow pigments, molybdate red pigments, due to their toxicological concerns, with modern systems based on ecological pigments. This paper presents an alternative to usual chrome yellow pigment (Pigment Yellow 34) and molybdate red pigment (Pigment Red 104) by using two ecological pigments: an inorganic bismuth-vanadate pigment (PY 184), and respectively an organic pigment (PY 74). Several powder-coating formulations are proposed, having the same colour characteristics as these containing traditional pigments.

Keywords: powder coating, pigment, chrome yellow, molybdate red

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