

Dye Class and Pigment Descriptions for Polyester

Orcocilacron™ dyes are a group of disperse dyes characterized as medium and high-energy disperse types for the dyeing of polyester atmospherically with carrier, under high temperature/pressure dyeing, and continuous/thermosol dyeing. These are offered in both powder and liquid/paste forms. Unlike the lower energy **Orcocil™** disperse dyestuffs, these tend to have a larger molecular size, lower volatility, and hence, better sublimation properties.

OrcoSperse™ Pigments on polyester offer a wide shade range including fluorescent colors. These can be applied by printing or padding. If good crocking and washfastness properties are required, it is recommended that **Orcocilacron™** Disperse dyes are used. Also, lightfastness of fluorescent pigments are generally low. **OrcoSperse™** Pigments, unlike dyestuff classes which rely on either some form of ionic bonding or solution/gaseous penetration into the substrate and being somewhat inert, need an external binding medium to provide fastness to washing and rubbing (crocking). These binding agents usually are in the form of either an acrylic or styrene type water based emulsion system which, when properly cured, offer fair to good wash fastness with minimal crocking in light to medium depths of shade. The main advantages of pigments lay in their ease of use over a wide range of substrate blends and their good to excellent lightfastness. Dark shades do usually present a crock problem and the use of higher amounts of resinous binders to overcome this are not particularly effective and create an additional problem of harsh handle. Since the binder system used dictates the cure/time temperatures necessary, careful attention to the technical data for the binder should be exercised.