

How to Print on Cotton Using **OrcoSperse™** Pigments

Pigment printing concerns itself with the following basic factors:

OrcoSperse™ Pigments are aqueous pigments nonionically or anionically dispersed. These may or may not be resin-bonded.

Low-Crock is a resinous material, usually acrylic or styrene butadiene latex which, in some cases, is compounded with a melamine formaldehyde resin to improve cross-linking and thus improving washfastness.

Clear Concentrate is usually a synthetic polymer dispersed in an emulsion or colloid which swells and increases in viscosity when dispersed in water usually with high shear mixers like a Barenco or a Hill homogenizer.

1. Prepare typical print paste with the following:

1-8 parts **OrcoSperse™** Pigment concentrate
1.5-2.5 parts **Orco Clear Conc SP-2™**
5-10 parts **Orco Low-Crock T-550™**
Xparts Water

1. Charge tank as follows in order listed:

Xparts Cold Water
1.5-2.5 parts **Orco Clear Conc SP-2™**

2. Run a high-speed mixer 10-12 minutes until smooth.
3. Add 5-10 parts **Orco Low-Crock T-550™**.
4. Add desired amount of **OrcoSperse™** Pigment print paste prepared above and continue mixing for 4-8 minutes until dispersion is complete.
5. Check viscosity. If a higher viscosity is desired, add additional **Orco Clear Conc SP-2™** with mixing for 5-7 minutes.
6. Print material on either a flat-bed screen or rotary screen.
7. Cure at a minimum of 275-300°F(135-150°C) for 60-90 seconds.