



Technical Bulletin #239

September 9, 2014

Test Procedures For Screen Print Shops

Dye Migration Test

- Lay test fabric on transfer machine.
- Apply a quarter size spot of plasticizer (EA0005 Viscosity Reducer) or clear Gel ink.
- Lay a piece of white cloth or pelon on top of the plasticizer.
- Heat press at 320°F (160°C) for 30 seconds.
- Remove from the press and check the white fabric for staining. The more stain present on the white fabric the more severe the dye migration. **Note:** All polyester colors will migrate, this test is to gauge the severity of that migration and allow you to choose the proper low bleed ink.
- Test several known good fabrics (previous production runs) and compare the stain characteristics of those to the test stain to determine a pass/fail specification.

Ghost Test

- Print on suspect fabric with selected plastisol ink and cure normally.
- Lay test fabric on transfer machine & moisten (spray with water) the print area.
- Fold part of the unprinted fabric over the moistened print area.
- Heat press at 250°F (130°C) for 30 minutes.
- Remove from press, unfold and check the unprinted portion of the garment for ghost effect.

Bleed (Accelerated Heat Age) Test

- Print design on suspect fabric (one that contains colored polyester).
- Cut design in 1/2.
- Expose half of the design to 122°F (50°C) for 24 hours.
- This will simulate bleed from garment into the ink that would normally occur in 1 to 7 days.

Crock Test—AATCC Test Method 8-1989

- Place a printed and cooled test sample on the base of the Crock meter resting on the abrasive cloth with its long dimension in the direction of the rubbing.
- Attach a clean crock cloth to the Crock meter.
- Cycle the Crock meter 10 cycles.
- Evaluate against the AATCC Chromatic Transference Scale (0-5 where 0 is total fail & 5 is no crock).
- Pass is normally 3.5 or better.