

PROPERTIES

CI-2036

Carbon Ink for Print Treat Non-Print Treat PET

DESCRIPTION CI-2036 is a carbon conductive ink designed to adhere to print treated and non-print

treated polyester. CI-2036 adheres to a wide spectrum of substrates including print treated and non-print treated polyester, paper, and most plastic films. CI-2036 is

application ready with no dilution needed.

ADVANTAGES ✓ Stable resistance ✓ No dilution required

✓ Excellent adhesion ✓ Low application weights

✓ Superior flexibility ✓ Fast curing

✓ Extended screen residence ✓ Excellent printability

TYPICAL Color Black

UNCURED Appearance Thixotropic paste

Total Solids Content 45.6 % Density 9.7 lbs/gallon

Flash Point 212°F (100°C) Tag Close Cup VOC 634.5 grams of solvent/liter

Theoretical Coverage 596.1 ft²/Gal/Mil

12.6 m²/kilogram/25.4 microns

TYPICAL CURED Electrical Resistance 1000 Ohms/Square @ 1.0 Mil +/- 20%

PROPERTIES (Cured at 10 Minutes at 230°F)

APPLICATION INFORMATION

- o Typical screens used are 180 220 mesh with a 1.0 mil emulsion.
- O Stainless steel fabric can be used to increase dry film thickness.
- Complete cure can be confirmed by recuring the print a second time and testing the electrical resistance. The electrical resistance should not decrease by more than 5%.
- Typically, it is not possible to over cure **CI-2036**. Added curing will improve the flexibility and conductivity properties.
- CI-2036 can also be cured with infrared energy. This method often provides improved properties over conventional heat curing.
- CI-2036 can be blended with a resistance modifier to increase electrical resistance values. Please contact a Polymark technical service professional for recommendations.

CURE SCHEDULE

CI-2036 does not require any leveling time and can be forced cured immediately after printing. Typical forced curing is for 10 minutes at 230 $^{\circ}$ F. Various time and temperature combinations can be used.

CLEAN UP

CI-2036 can be cleaned up with M.E.K (Methyl Ethyl Ketone) or a blend of solvents that will completely clean a cured film. Screens and printing tools should be allowed to dry completely before reuse. To avoid possible squeegee swelling, a solvent resistant material such as polyurethane should be used. Typically a high durometer squeegee will provide the best results.

STORAGE AND HANDLING

- o Shelf life is six (6) months in an unopened container when stored below 70°F.
- Store product below 70°F for maximum shelf life and minimal solvent loss.
 Avoid high temperature exposure.
- o It is suggested that the product be stored at 55°F to increase shelf life. The product must be conditioned back to room temperature before use.

HEALTH AND SAFETY

- Use with adequate ventilation.
- Avoid skin contact.
- o If ingested, consult a physician immediately.
- o Consult the product Material Safety Data Sheet for additional information.

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