




Coates Screen

PRODUCT DATA SHEET

Product: SPECIAL METALLIC CHROME**Series: SMC™**

DESCRIPTION: SMC Special Metallic Chrome is a unique screen printing ink which was formulated to produce a mirror finish when printed onto polycarbonate and polyester substrates.

NOTE: Pretest all substrates prior to use in production.

PROCESSING RECOMMENDATIONS:

- The optimal condition for producing defect-free, mirror-finish prints is to apply SMC directly onto the 2nd surface (subsurface) of the substrate.
- When trapping or overprinting SMC with other ink layers, slight dulling or hazing of the mirror finish can occur due to re-wetting and interference of leveling to the substrate. To minimize this, follow drying recommendations below.
- Multiple hits of SMC may result in a different finish and appearance than single layer prints.
- Drying time and temperature will affect the final appearance of prints made with SMC. It is therefore important to arrive at a drying schedule that gives the desired appearance and to exert rigorous control on drying conditions throughout a print run.

MODIFICATION: Prior to processing, the viscosity of SMC may be adjusted 5-15%, by weight, with ST-212 reducer

DRYING:

- SMC dries by evaporation of solvents. A suggested drying schedule would be 15-25 minutes air dry to allow proper leveling of the aluminum, and then 145-160F for 2 minutes.
- Jet drying of SMC immediately after printing, without first allowing 15-25 minutes of air-drying, will greatly reduce the mirror finish and create more surface defects (e.g. pinholes, AKA "starlighting").
- If utilizing a rack drying system, ensure good air circulation to prevent solvent being trapped in the ink film.

OVERPRINTING: Since SMC is usually printed on 2nd surface, barrier or backing flood coats can be used to increase opacity. Refer to the SMC drying schedule (above) to minimize dulling and hazing of the mirror finish.

MESH: Depending on the desired appearance, finish and print definition, 156-305/inch (61-120/cm) mesh may be used. **Sun Chemical has the mesh best suited for your particular printing requirements. Contact your local Sun representative for details.**

COVERAGE: When printed through a 156/in. (90/cm) mesh, one Kilo of SMC will cover approx. 200 square feet.

STENCIL: Direct photo emulsion, capillary film, indirect stencils or solvent resistant stencil

SQUEEGEE: Medium to hard durometer urethane squeegee. **Sun Chemical has the best squeegee for your particular application. Contact your local Sun representative for recommendations.**

CLEANING: SMC can be removed from stencils and tools using ET-5 Retarder, VL Wash, or many other commercial screen washes. **Sun Chemical has a variety of wash-ups including ECO friendly screen washes available for your particular needs. Contact us for all of your pre and post-press chemical requirements.**

HEALTH AND SAFETY: As with all inks, gloves and safety goggles should be used when handling this product. For more complete information, refer to the relevant **Material Safety Data Sheet.**

PRODUCT CODES:

SMC Special Metallic Chrome

ST-212 Reducer

In accordance with information received from suppliers, the full SMC series is formulated without heavy metals and complies with: 16 CFR, Part 1303; ANSI Z66.1-1964; ASTM F 963; CONEG packaging regulations; EC Packaging Waste Directive EC/94/62; EN71, section 3; RoHS 2002/95/EC; WEEE 2002/96/EC; E2003/11/EC.



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