

PROCESSING GUIDELINES

Storage

PTF inks should be stored in a dry place at a temperature of 15 - 20°C. Do not freeze.

Mixing

It is recommended that the S-series and C-series ink are stirred briefly by hand before use, the S-series ink can also be jar-rolled before use if required. Care should be taken to ensure that excessive amounts of air are not introduced into the ink during the mixing process.

Screen Printing

The ink may be used with either manual or semi-automatic screen printers. Screen mesh size will serve to determine print thickness achieved. A standard steel screen with a mesh size of 200 wires / inch and an emulsion thickness of 20 µm will result in a cured deposited thickness of typically 10 - 15 µm.

Thinning

The ink is supplied ready-to-print. However if thinning is required please contact Technical Services at Silver & Coating Technologies for recommended solvent. As a guideline, an addition of 1.0 wt% solvent will produce an approximate 10 - 15 % reduction in viscosity. Ensure the ink is thoroughly mixed after thinning.

Curing

The conductivity, adhesion and abrasion resistance achieved with PTF inks are strongly dependent on the curing condition used. Final film properties such as hardness and adhesion will improve with ageing of the cured ink. A minimum time of one hour is recommended before further processing of the printed sheet. Typical curing schedules are:

- Box oven - 15 minutes at 120°C (typical)
- Forced air curing - 5 minutes at 130°C (optimal)

Clean-up

Use either carbitol acetate (ethyl diglycol acetate) or 2-butoxy ethyl acetate.