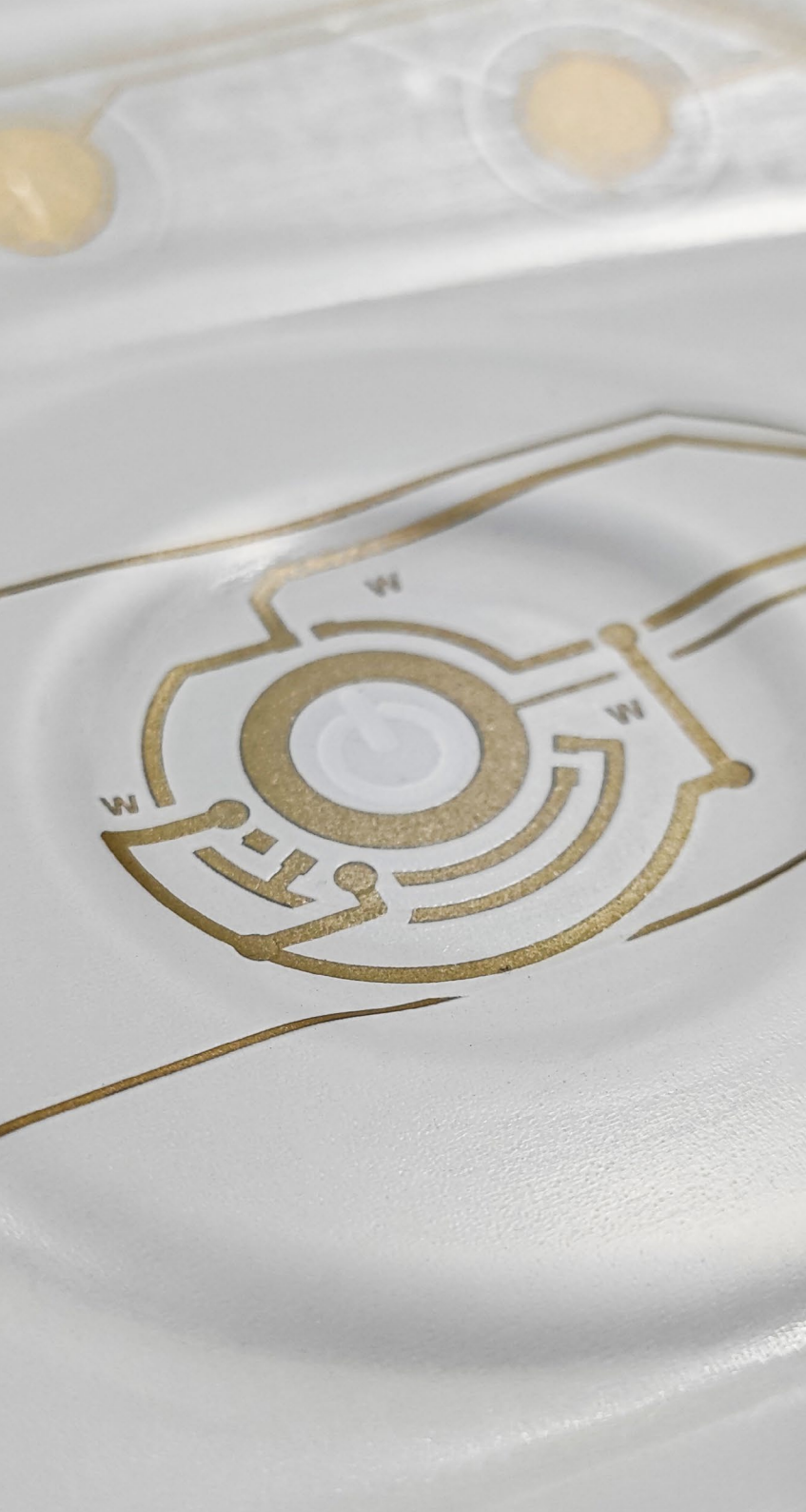


POLYMER THICK FILM FOR IME TECHNOLOGY

STORAGE, HANDLING AND
GENERAL RECOMMENDATIONS



**FROM 1984,
LEADER
IN SILVER
MATERIALS FOR
THE THICK FILM
TECHNOLOGY**



CONTENTS

- Overview on Chimet material for IME
- Storage and Best practice before screen printing
- Precautions during the screen printing
- Thinning and cleaning
- Sheet resistance



OVERVIEW

SILVER MATERIAL AG PASTE 550 EI

→ Screen printable, solvent based and thermally dried conductive formable silver ink with improved elongation

SILVER MATERIAL AG PASTE 555 EI

→ Screen printable, solvent based and thermally dried high conductive formable silver ink with acceptable elongation

SILVER MATERIAL AG PASTE 556 EI

R&D material → Screen printable, solvent based and thermally dried silver ink with very high conductive with compatibility on flat formable substrates

CARBON MATERIAL C PASTE 850 EI

→ Screen printable, solvent based and thermally dried carbon ink with barrier properties and conductivity

DIELECTRIC MATERIAL D PASTE 250 EI

→ General purpose screen printable, solvent based and thermally dried cross over ink

DIELECTRIC MATERIAL D PASTE 260 EI

→ High reliability screen printable, solvent based and thermally dried cross over ink

ELECTRICALLY CONDUCTIVE ADHESIVE AG PASTE 903 EI

→ Dot dispense, solvent free and thermally cured for fixing components on a flat printed substrate before thermoforming process

STORAGE

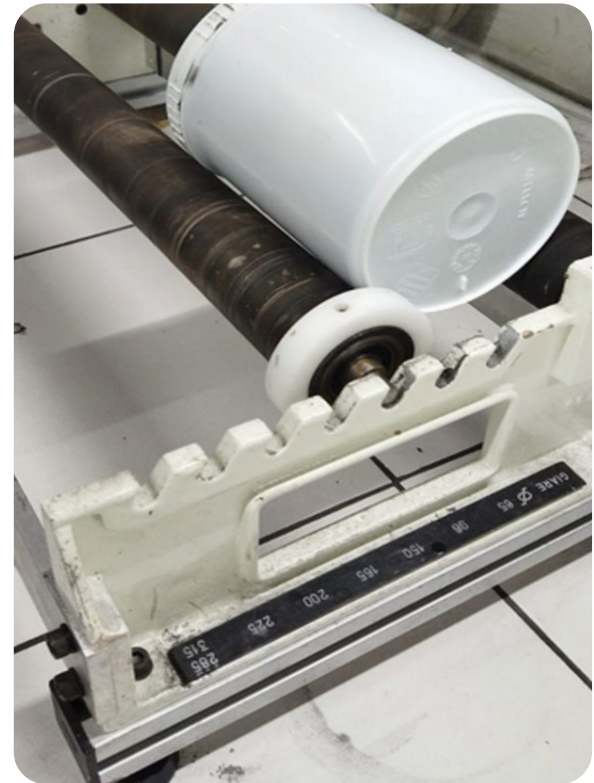
Containers should be stored at room temperature (best is 15°C-25°C) with lids and security label tightly sealed and in a ventilated area. The paste shelf life for an unopened container is 6 months from date of production. Avoid introduction of any kind of solvent the paste. Shelf life can be improved storing at low temperature (best is 4°C-10°C).

BEST PRACTICE BEFORE SCREEN PRINTING

Before to screen print keep the container at the screen-printing room temperature (best is 20°C-25°C) at least 12 hours before to start the operations. In this time jar roll at low rpm for some hours.

Chimet Polymer Thick Film are ready to use material:

- Gently stir prior to use
- Avoid rapid stirring, as this causes air entrapment



Jar rolling

PRECAUTION DURING SCREEN PRINTING

Material removed from containers may be contaminated during use. Do not return product to the original container. Segregate the used paste in a different container than the original one. Add thinner in case viscosity needs to be adjusted.

THINNING AND CLEANING

Should thinning become necessary, use the adequate thinner (1 to 2% by weight, see data sheet for more details).

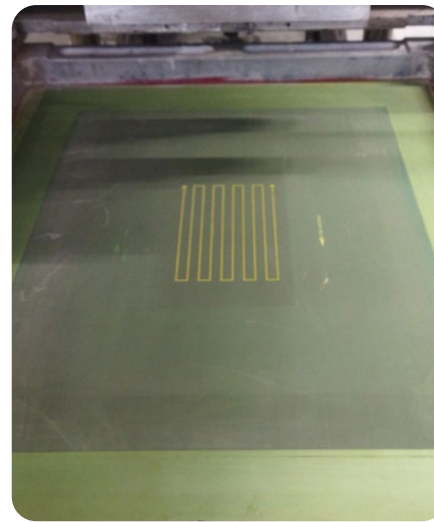
Equipment can be cleaned using solvent in use in screen printing room as ethylene diacetate, MEK, MIBK, isopropyl alcohol or acetone (low boiling point solvents). Mixture of solvents can be considered too. In case of important clogging by dry past into the meshes we recommend washing several times with DBE dibasic esters (CAS 95481-62-2) corresponding to thinner 0204IT and followed by low boiling point solvents).

SHEET RESISTANCE

Sheet resistance is to be intended measured after flat thermoforming in Formec 508DT/FS and on Polycarbonate substrate. Data reported are normalized @25 μ . Resistance is measured on a 1000m x 1mm meander.



Formec 508DT/FS



1000x1mm meander

e.g.

- Meander resistance = 40 Ω
- Thickness = 9.5 μ

Resistivity is

$$\frac{(40 \times 1000\text{m}\Omega \times 9.5\mu \times 1\text{mm})}{(1000\text{mm} \times 25\mu)} = 15.2\text{m}\Omega/\square/25\mu$$

