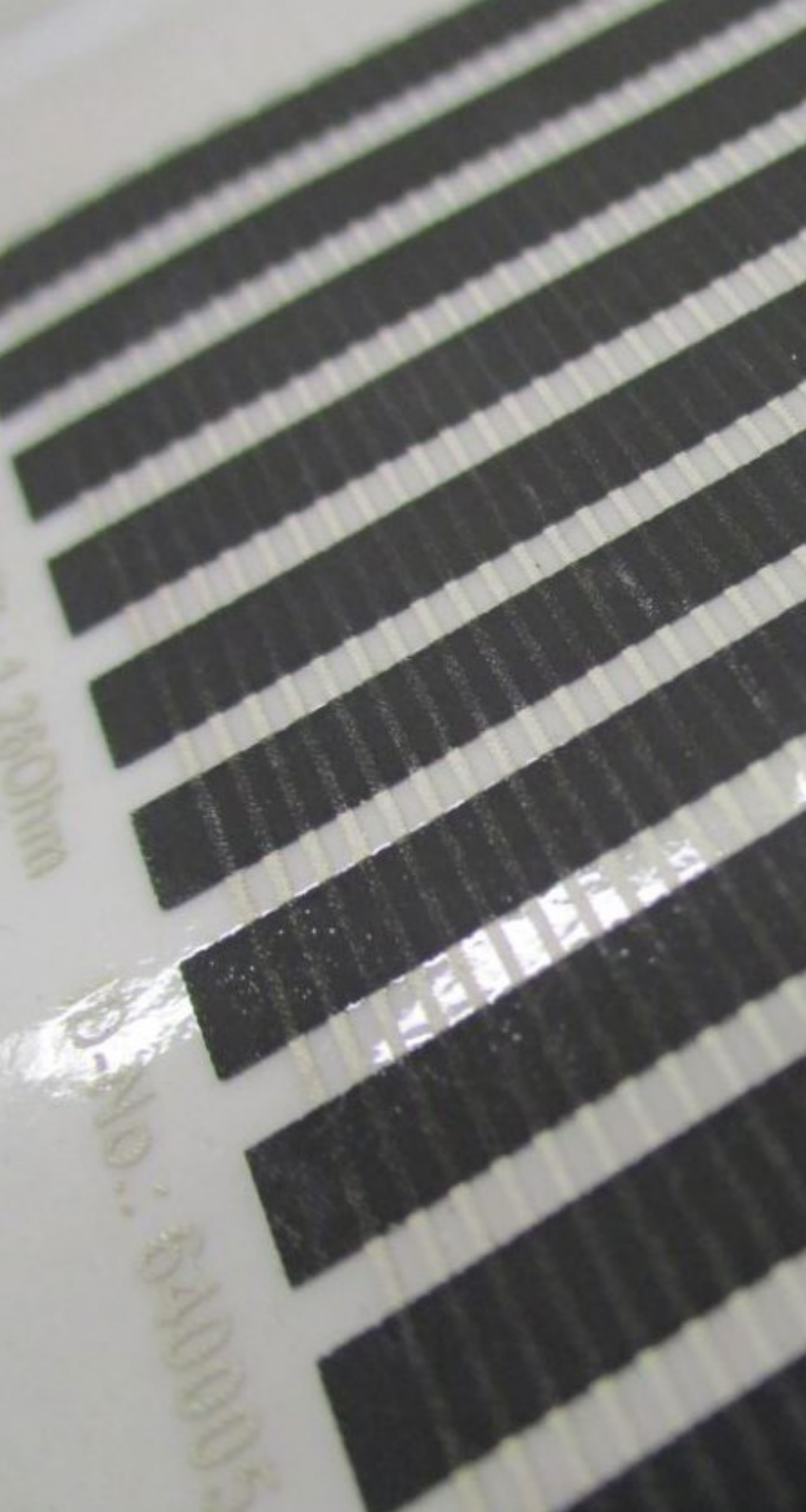


POLYMER THICK FILM FOR SOFT ELECTRONIC

STORAGE, HANDLING AND
GENERAL RECOMMENDATIONS



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



CONTENTS

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



OVERVIEW

SILVER MATERIAL AG PASTE 520 EI

→ Screen printable, solvent based and thermally dried conductive elastic silver ink

CARBON MATERIAL C PASTE 820 EI

→ Screen printable, solvent based and thermally dried carbon elastic ink

PROTECTIVE MATERIAL D PASTE 220 E

→ Screen printable, solvent based and thermally dried elastic ink for the circuit protection

PEELABLE MATERIALS AVAILABLE UNDER REQUEST

STORAGE

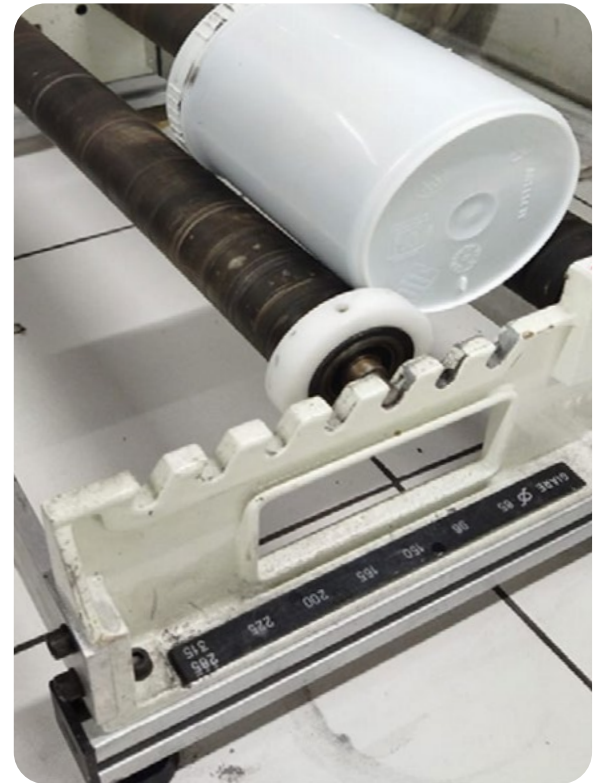
Containers should be stored at room temperature (best is 15°C-25°C) with lids and security label tightly sealed and in a ventilated area. The paste shelf life for an unopened container is 6 months from date of production. Avoid introduction of any kind of solvent the paste. Shelf life can be improved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

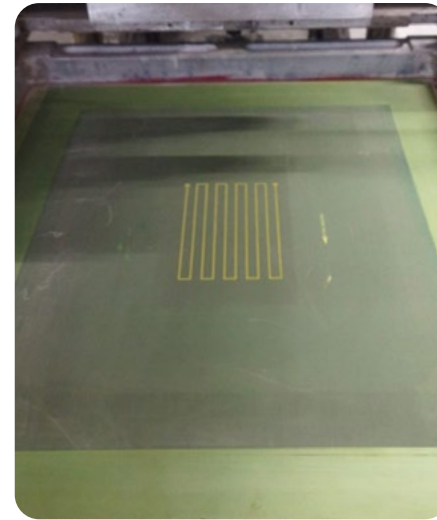
THINNING AND CLEANING

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 drying for 20' @100°C on polyester polyurethane substrate. Data reported are normalized @25μ. Resistance is measured on a 1000m x 1mm meander.



1000x1mm meander

e.g.

- Meander resistance = 40Ω
- Thickness = 9.5μ

Resistivity is

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



chimet[®]
REFINING AND FINE CHEMICALS

Via dei Laghi 31/33
52041 Badia al Pino (AR) Italy
Reg. Imprese Arezzo
C.F. e P.I.00155440514
R.E.A. 61012/AR

www.chimet.com