**Technical Data Sheet**

**THICK FILM MATERIALS**

**Product Type:** End Terminations  
**Product Name:** ET2003

---

**Polymer Silver Plateable End Termination**

**Description**

ET2003 is a dippable polymer based silver end termination with a reduced silver content for cost sensitive applications. It contains a fast curing polymer system.

ET2003 is a Pb and Cd free Ni/Sn plateable polymer end termination designed to be compatible on multilayer ceramic chip capacitors (NPO and X7R bodies).

**Key Benefits**

- Ni and Sn plateable  
- Solvent resistant  
- Pb and Cd free  
- REACH\(^1\) and ROHS\(^2\) compliant

**Typical Properties**

**Metal Type**  
Silver

**Adhesion**  
Excellent Adhesion

**Solvent Resistance**  
Excellent

**Viscosity**  
20 – 40 Kcps Brookfield HBT  
SC4 – 14 spindle, 6R utility cup at 10 rpm, 25 °C

**% Solids**  
55.0 ± 1.0 %

**Application**  
A blotting step can be used to control the amount of paste deposited on the chip body, if needed.

**Recommended Processing Guidelines**

**Mixing**  
Material should be thoroughly mixed prior to use

**Cleaning**  
Clean uncured resin with Acetone or similar solvent

**Drying**  
120 °C for 20 minutes

**Curing**  
185 °C for 60 minutes

**Resistance**  
< 90 mΩ/□ per mil  
200 °C for 30 minutes

**Thinner:**  
V-521

**Warranty:**  
Material guaranteed to meet specifications for 3 months from date of shipment.

**Handling and Precautions:**

Use in a well-ventilated area  
Avoid contact with skin  
Wash with soap and water

**Storage:**  
Refrigeration a 5 °C required to maintain shelf life.  
Allow paste to come to room temperature prior to opening.  
Spatulate well before using, as settling may occur during storage.

3 months shelf life at room temperature  
6 months shelf life when stored in refrigeration
The descriptions and engineering data shown here have been compiled by Heraeus using commonly accepted procedures, in conjunction with modern testing equipment, and have been compiled as according to the latest factual knowledge in our possession. The information was up to date on the date this document was printed (latest versions can always be supplied upon request). Although the data is considered accurate, we cannot guarantee accuracy, the results obtained from its use, or any patent infringement resulting from its use (unless this is contractually and explicitly agreed in writing, in advance). The data is supplied on the condition that the user shall conduct tests to determine materials suitability for particular application.