# DuPont 1187

PLATABLE SILVER TERMINATION FOR MLC CHIP APPLICATIONS

### **Technical Data Sheet**

## **Product Description**

DuPont 1187 is platable silver termination specially developed for multi-layer ceramic (MLC) chip applications, that meets the needs of low cost and high performance. DuPont 1187 is optimized for dipping and thinning is not normally required.

#### **Product Benefits**

- Eliminate burnishing process
- High mechanical strength
- Controlled rheology to meet dipping equipment
- High thermal shock stability
- Good electrical properties
- Cadmium-free\*, lead-free\*

\*Cadmium and lead "free" as used herein means that cadmium and lead are not intentional ingredients in and are not intentionally added to the referenced product. Trace amounts however may be present.

#### **Firing**

Care must be taken to ensure that any gases/ vapors from other chemicals or materials (e.g. halogenated solvents) do not enter the furnace muffle. It is also essential that the air supply to the furnace is clean, dry and free of Air flows and extraction rates contaminants. should be optimized to ensure that oxidizing conditions exist within the muffle, and that no furnace exhaust gases enter the room. DuPont 1187 termination composition is fired on a 40 minute firing cycle to a peak of 800°, held for 5-10 minutes. Variations in the peak firing temperature and/or time at the peak temperature may result in variations in the final fired properties. Care must be taken to assess the appropriate firing conditions for a particular body type.

## **Composition Properties**

Test	Properties
Viscosity (Pa.S) Brookfield RVT, UC&SP, 10rpm, 25°C]	34 - 42
Solids, (150°C)(%)	76.0 - 77.2
Thinner	DuPont 8218
Firing properties are based on a 30 minutes firing cycle with 10 minutes at a peak of 800°C	

Table 1 shows anticipated typical physical properties for DuPont 1187 based on specific controlled experiments in our labs and are not intended to represent the product specifications, details of which are available upon request.

## Storage and Shelf Life

Containers should be stored, tightly sealed, in a clean, stable environment at room temperature (<25°C). Shelf life of material in unopened containers is six months from date of shipment. Some settling of solids may occur and compositions should be thoroughly mixed prior to use.

## Safety and Handling

For Safety and Handling information pertaining to this product, read the Material Safety Data Sheet (MSDS).

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