

MicromaxTM 5738R

Microcircuit and Component Materials

Au Co-fire Via Fill Composition

Micromax[™] 5738R cofirable Au conductor is part of the Micromax[™] GreenTape[™] 951 low temperature co-fired ceramic system. It has been designed to provide reliable connections between recommended Au conductor layers.

Product benefits

When used with Micromax™ GreenTape™ 951 and compatible conductors pastes:

- Co-fire processing
- · High conductivity
- · High circuit density
- Phthalate, Cadmium, Nickel oxide free*

*Phthalate, Cadmium and Nickel oxide 'free' as used herein means that cadmium, phthalate and nickel oxide are not intentional ingredients in and are not intentionally added to the referenced product. Trace amounts however may be present.

Product information

Solvent or thinner Micromax™ 9450

Rheological properties

Viscosity 5800 - 7300^[1] Pa.s

[1]: Brookfield HBT, UC&S, SC4-14/6R, 1 rpm, 25°C±0.2°C

Application technique

 $\begin{array}{cccc} \text{Mask emulsion} & 20 \text{ - } 25^{[2]} & \mu\text{m} \\ \text{Drying time} & 5 & \text{min} \\ \text{Drying temperature} & 120 & ^{\circ}\text{C} \\ \text{Leveling time} & 5 \text{ - } 10 & \text{min} \\ \end{array}$

[2]: metal stencil

Storage and stability

Shelf life 6^[3] months

[3]: in unopened containers, from date of shipment, at temperature between 5° C-30° C

Additional information

How to use Design & compatibility

Design

Recommended processing procedure for MicromaxTM

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GreenTapeTM 951 are detailed in the 951 low-temperature cofire dielectric tape technical data sheet. For compatible thick films compositions, consult your MicromaxTM representative.

Processing

- Screen types
 - $\circ~20\text{-}25\mu m$ thick etched or punched metal stencil, with a squeegee speed as low as 10mm/s.
- Clean-up solvent
 - o 1-Propoxy-2-Propanol
- Drying
 - Allow prints to level for over 5-10 minutes at room temperature, then dry for 5 minutes at 120°C. Do not over-dry.
- Firing
 - Consult Micromax™ GreenTape™ 951 technical data sheet.

Properties

 All values reported here are results of experiments in our laboratories intended to illustrate product performance potential with a given experimental design. They are not intended to represent the product's specifications, details of which are available upon demand.

Storage and shelf life

Containers may be stored, in a clean, stable environment at room temperature (between $5\,^{\circ}\text{C}$ - $30\,^{\circ}\text{C}$) with their lids tightly sealed. Storage in high temperature (<30 $\,^{\circ}\text{C}$) or in freezers (temperature $0\,^{\circ}\text{C}$) is NOT recommended as this could cause irreversible changes in the material. The shelf life of compositions in factory-sealed (unopened) containers between ($5\,^{\circ}\text{C}$ - $30\,^{\circ}\text{C}$) is six months from date of shipment.

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