

Micromax™ 5450T

Microcircuit and Component Materials

Platable Edge C2 Termination

Especially developed for chip resistors, resistor arrays and network applications, Micromax™ 5450T is a polymeric platable silver C2 edge termination that can meet the needs of lower cost and high yield maintained high performances over fired type C2 edge termination.

Product benefits

- Low temperature curing (200 °C, 30 min.)
- High plated adhesion
- Good dipping performance
- Stable viscosity / rheology
- Good platability
- Good conductivity
- Cadmium, Lead, Nickel and Phthalate free*

*Cadmium, Lead, Nickel and Phthalate 'free' as used herein means that cadmium, lead, nickel, and phthalate 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™ 9245
Solid content	70 - 73 ^[1] %
[1]: 750 °C	

Rheological properties

Viscosity	15 - 20 ^[2] Pa.s
[2]: Brookfield RVT, SC4-14/6R, 10 rpm, 25 °C	

Application technique

Drying time	10 min
Drying temperature	150 °C
Leveling time	5 - 10 min

Storage and stability

Shelf life	3 ^[3] months
[3]: in unopened containers, from date of shipment, at temperature between 0 °C-5 °C	

Micromax™ 5450T

Microcircuit and Component Materials

Additional information

How to use

Processing

- **Substrates**
 - Reported properties are based on test with 96% alumina substrates. Substrates of other compositions may yield variations in performance properties.
- **Dipping**
 - Paste rheology of Micromax™ 5450T is designed for dipping application.
- **Thinning**
 - Micromax™ 5450T is optimized for dipping. Thinner is normally not required. Use the Micromax™ recommended thinner for slight adjustments to viscosity or to replace evaporation losses. The use of too much thinner or the use of a non recommended thinner may affect the rheological behavior of the material.
- **Drying**
 - Dipped parts should be allowed to level at room temperature for 5-10 minutes and then dried at 150°C for 10 minutes.
- **Curing**
 - Properties are based on a curing cycle with 30 minutes at peak of 200°C.

Properties

- Information in this datasheet shows anticipated typical physical properties for Micromax™ 5450T 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

Shelf life is three months from date of shipment when refrigerated (0-5°C). Storage at room temperature is not recommended. Gradual polymerization and associated viscosity increase, and mechanical separation can be expected over a period of a few months. When refrigerating and/or freezing conditions are used for storage, materials should be allowed to equilibrate to room temperature before opening to prevent pick up of moisture from condensation. After the containers are opened, use and storage conditions and the possible effects of contamination make shelf limits unpredictable.

Micromax™ 5450T

Microcircuit and Component Materials

Safety and handling

For safety and handling information pertaining to this product, read Safety Data Sheet (SDS).

NOTICE TO USERS: Values shown are based on testing of laboratory test specimens and represent data that fall within the standard range of properties for natural material. These values alone do not represent a sufficient basis for any part design and are not intended for use in establishing maximum, minimum, or ranges of values for specification purposes. Colourants or other additives may cause significant variations in data values. Properties of moulded parts can be influenced by a wide variety of factors including, but not limited to, material selection, additives, part design, processing conditions and environmental exposure. Other than those products expressly identified as medical grade (including by MT® product designation or otherwise), Celanese's products are not intended for use in medical or dental implants. Regardless of any such product designation, any determination of the suitability of a particular material and part design for any use contemplated by the users and the manner of such use is the sole responsibility of the users, who must assure themselves that the material as subsequently processed meets the needs of their particular product or use. To the best of our knowledge, the information contained in this publication is accurate; however, we do not assume any liability whatsoever for the accuracy and completeness of such information. The information contained in this publication should not be construed as a promise or guarantee of specific properties of our products. It is the sole responsibility of the users to investigate whether any existing patents are infringed by the use of the materials mentioned in this publication. Moreover, there is a need to reduce human exposure to many materials to the lowest practical limits in view of possible adverse effects. To the extent that any hazards may have been mentioned in this publication, we neither suggest nor guarantee that such hazards are the only ones that exist. We recommend that persons intending to rely on any recommendation or to use any equipment, processing technique or material mentioned in this publication should satisfy themselves that they can meet all applicable safety and health standards. We strongly recommend that users seek and adhere to the manufacturer's current instructions for handling each material they use, and entrust the handling of such material to adequately trained personnel only. Please call the telephone numbers listed for additional technical information. Call Customer Services for the appropriate Materials Safety Data Sheets (MSDS) before attempting to process our products.

© 2023 Celanese or its affiliates. All rights reserved. Celanese®, registered C-ball design and all other trademarks identified herein with ®, TM, SM, unless otherwise noted, are trademarks of Celanese or its affiliates. Fortron is a registered trademark of Fortron Industries LLC. KEPITAL is a registered trademark of Korea Engineering Plastics Company, Ltd.