

Micromax™ 5402C

Microcircuit and Component Materials

Platable C2 Edge Termination for Chip Resistor Applications

Especially developed for chip resistor applications, Micromax™ 5402C is a platable silver C2 edge termination that meets the needs for low cost and high performance.

Product benefits

- Low temperature firing
- Excellent dipping performance
- Excellent cosmetics
- Excellent post-plating adhesion
- High acid resistance
- Cadmium free*

*Cadmium “free” as used herein means that this is not intentionally added to the referenced product. Trace amounts however may be present.

Product information

Solvent or thinner

Micromax™ 9245

Rheological properties

Viscosity

45 - 55^[1] Pa.s

[1]: Brookfield RVT, UC&S, 10 rpm

Application technique

Drying time

10 min

Drying temperature

150 °C

Leveling time

5 - 10 min

Storage and stability

Shelf life

6^[2] months

[2]: in unopened containers, from date of shipment, at temperature <25° C

Additional information

How to use

Processing

• Substrates

- Reported properties are based on tests with 96% alumina substrates. Substrates of other compositions may yield variations in performance properties.

Micromax™ 5402C

Microcircuit and Component Materials

- **Dipping**

- Paste rheology of Micromax™ 5402C has been optimized for dipping of the chip resistor edges after the alumina substrate has been broken into strip form. While thinning is not normally recommended, Micromax™ 9245 thinner may be used for minor adjustments.

- **Drying**

- After dipping, parts should be allowed to level at room temperature for 5-10 minutes and then dried at 150°C for 10 minutes.

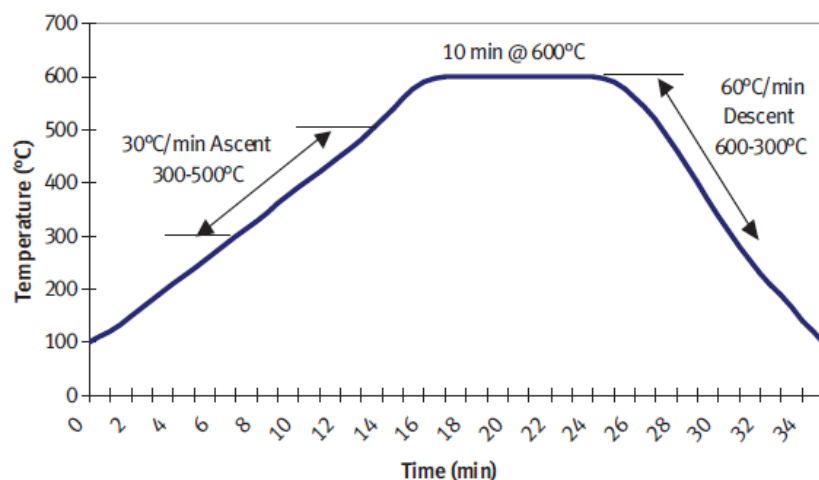
- **Firing**

- Fire to peak temperature of 600-620°C for 10 minutes at peak with a total firing cycle of 30 minutes. Allow adequate time (10 minutes) during heating cycle to avoid entrapment of organics in the fired film.

Properties

- Information in this datasheet shows anticipated typical physical properties for Micromax™ 5402C based on specific controlled experiments in our labs and are not intended to represent the product specifications, details of which are available upon request.

Typical 600°C 10 Minute Profile



Micromax™ 5402C

Microcircuit and Component Materials

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 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.