

MicromaxTM CB459

Electronic Inks and Pastes

Platable Silver Conductor

Micromax[™] CB459 is a polymeric platable silver composition. It can be easily applied using standard screen printing techniques.

Product benefits

- Additive process
- Thermoset type of resin
- Single composition type
- Low temperature curing (200 °C, 30 min.)
- High plated adhesion
- Stable viscosity / rheology
- · Good platability

Product information

Solvent or thinner Micromax™ 9245

Rheological properties

Viscosity 16 - 22^[1] Pa.s

[1]: Brookfield RVT, #14 spindle UC&S, 10 rpm, 25°C

Application technique

Mask mesh	200 - 280 ^[2]	
Drying time	10	min
Drying temperature	150	°C
Leveling time	5 - 10	min

[2]: Screen Types: Stainless steel

Electrical properties

Surface resistivity	≤50 ^[3] mOhm per
	square

[3]: at 25 μm thickness, prior to plating

Storage and stability

Shelf life 3^[4] months

[4]: in unopened containers, from date of shipment, at temperature between 0-5°C

Printed: 2023-09-21 Page: 1 of 3

Revised: 2023-06-26 Source: Celanese Materials Database



MicromaxTM CB459

Electronic Inks and Pastes

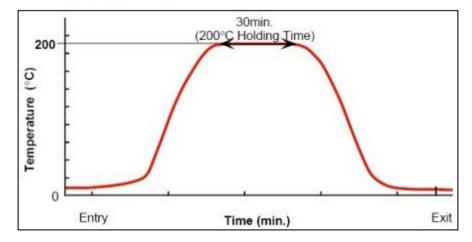
Additional information

How to use

Processing

- Substrates
 - · Epoxy glass, 96% alumina, and others
- Screen types
 - Stainless steel (200-280 mesh) or equivalent polyester screen
- Printing
 - · Reel-to-reel, semi-automatic, manual
- Work life
 - ∘ > 1 hour
- Thinning
 - Micromax™ CB459 is optimized for screen printing and thinning is not normally required. For minor adjustments, thinner Micromax™ 9245 is recommended.
- Drying
 - o Dry in a belt or box oven.
 - · A drying step prior to curing is recommended.
 - Parts should be allowed to level at room temperature for 5-10 minutes and then dried at 150 °C for 10 minutes.
- Curing
 - Cure in a belt or box oven.
 - Properties are based on a curing cycle with 30 minutes at peak of 200 °C. Lower curing temperatures may be possible but will require longer cure times.

Micromax™ Profile



Printed: 2023-09-21 Page: 2 of 3

Revised: 2023-06-26 Source: Celanese Materials Database



MicromaxTM CB459

Electronic Inks and Pastes

Properties

 Information in this datasheet shows anticipated typical physical properties for MicromaxTM CB459 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 0°C – 5°C. Shelf life of material in unopened containers is three months from date of shipment. Some setting 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).

Printed: 2023-09-21 Page: 3 of 3

Revised: 2023-06-26 Source: Celanese Materials Database

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 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, pr

© 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.