

Micromax[™] LF500

Electronic Inks and Pastes

Encapsulant Paste

Micromax[™] LF500 is a low temperature encapsulant for nitrogen fired materials, compatible with Micromax[™] copper conductors and Micromax[™] QP60 Resistors Series. When used as a resistor encapsulant, Micromax[™] LF500 can be laser trimmed.

Product information

Solvent or thinner $\text{Micromax}^{\text{TM}}$ 5928 Solid content $76 - 79^{[1]}$ %

[1]: 750°C

Rheological properties

Viscosity 50 - 80 Pa.s

Application technique

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

Properties are based on tests on 96% alumina substrates.
Substrates of other compositions and from various manufacturers may result in variations in performance properties.

Printing

 $\circ\,$ A 325 mesh stainless steel screen with a 10-15 μm emulsion thickness is recommended. Printing speeds up to 25 cm/s can be used.

Drying

Allow prints to level for 5-10 minutes at room temperature. Dry 10 minutes at 120°C in air. Drying above 150°C in air will oxidize the copper and affect the surface properties of the fired film.

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

Revised: 2023-06-27 Source: Celanese Materials Database



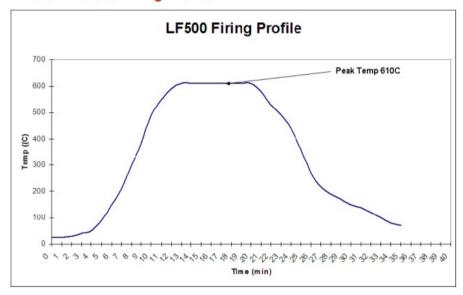
Micromax[™] LF500

Electronic Inks and Pastes

Firing

 Dried parts should be fired in a belt furnace. A total cycle time of 30 minutes and peak temperature of 610°C for 10 minutes is recommended. Nitrogen atmosphere must be used with a prevailing oxygen level of 5-10 ppm.

Recommended Firing Profile



Properties

Typical Physical Properties

Test	Properties
Black Speck (μm)	37

Information in this datasheet shows anticipated typical physical properties for MicromaxTM LF500 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.

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



Micromax[™] LF500

Electronic Inks and Pastes

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: 2023-06-27 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, 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 e

© 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.