

Micromax™ 8091

Electronic Inks and Pastes

Pb-Free Glass Encapsulant

Micromax™ 8091 encapsulant is Pb-free, and designed for use as a protective coating for hybrid circuits and ceramic components.

Product benefits

- Cadmium, Lead, Nickel and Phthalate free*
- Compatible with Micromax™ 2100 series resistors
- Hermetic fired film with excellent chemical durability
- Provides excellent protection from adverse environment
- Contains easy burn out organic vehicles

*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™ 8250
Density	2.4 g/cm ³
Solid content	74 - 76 ^[1] %
[1]: 750 °C	

Rheological properties

Viscosity	100 - 160 ^[2] Pa.s
[2]: Brookfield HAT, UC&S, 10 rpm, 25 °C	

Application technique

Mask mesh	200
Drying time	10 min
Drying temperature	150 °C
Recommended film thickness, dried	20 - 25 µm
Leveling time	5 - 10 min

Thermal properties

Linear Coefficient of Thermal Expansion	6.7 E-6/K
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Storage and stability

Shelf life

3^[3] months

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

Additional information

How to use

Processing

• Printing

- Print to dried print thickness of 20-25µm with a 200 mesh stainless steel screen.
- Note : Prior to use, Micromax™ 8091 should be thoroughly mixed with a clean spatula. Abrupt mixing should be avoided, as it causes excess of air trapped inside the paste. Printing should be carried out in a clean and well-ventilated room.
- To obtain optimal printing results, Micromax™ 8091 should be stored at 20-23°C prior to printing.
- Micromax™ 8091 is optimized for screen printing.

• Thinning

- Thinning is not recommended. For minor adjustment, thinner Micromax™ 8250 is recommended.

• Drying

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

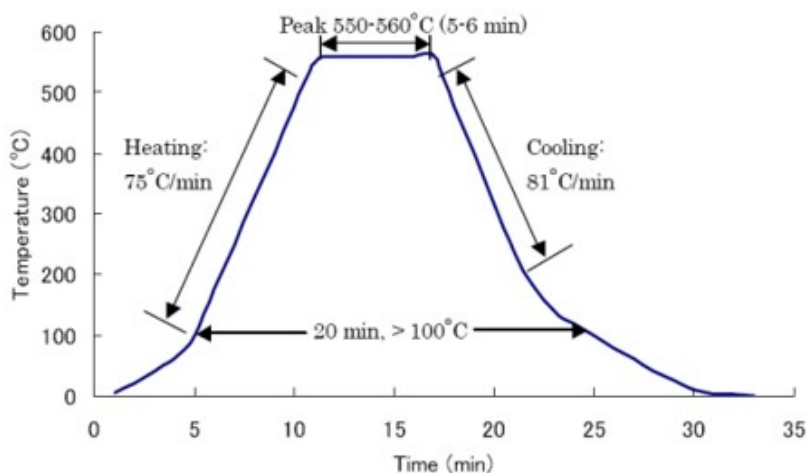
• Firing

- Fire to peak temperature of 550-560°C for 5-6 minutes at peak with a total firing cycle of 20-30 minutes. Allow adequate time (5-10 mins) during heating cycle to avoid entrapment of organics in the fired film.

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Micromax™ Profile (550-560°C X 5-6 min)



Storage and shelf life

Micromax™ 8091 should be stored in a clean, stable environment at room temperature 5°C - 30°C with their lids tightly sealed. Storage in freezers (temperature <0°C) is NOT recommended as this could cause irreversible changes in the material. Shelf life of material in unopened containers is 3 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).