

Micromax™ 5478

Electronic Inks and Pastes

Glass Encapsulant

Micromax™ 5478 is a screen printable, laser trimmable, air-fired G1 glass encapsulant for chip resistors.

Product benefits

- Acid resistant - withstands acidic nickel plating conditions
- G1 encapsulant for chip resistors
- Green colored, laser trimmable
- Higher viscosity for thick prints
- Lead, Cadmium, Nickel and Phthalate free*

* Lead, Cadmium, Nickel and Phthalate 'free' as used herein means that lead, cadmium, nickel and phthalate are not intentional ingredients in and are not intentionally added to the referenced product. Trace amount however may be present.

Product information

Solvent or thinner	Micromax™ 8218
Solid content	72 - 80 %

Rheological properties

Viscosity	300 - 400 ^[1] Pa.s
[1]: Brookfield HBT, UC&SP, 10 rpm	

Application technique

Mask mesh	250
Drying time	10 min
Drying temperature	150 °C
Recommended film thickness, dried	18 - 20 µm
Recommended film thickness, fired	11 - 12 µm
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

• Printing

- Print to a dried thickness of 18-20µm with a 250-mesh stainless steel screen to give a fired thickness of 11-12µm. Encapsulant

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composition Micromax™ 5478 should be thoroughly mixed before use. This is best achieved by slow, gentle hand stirring with a clean, burr-free spatula (flexible plastic or stainless steel) for 1-2 minutes. Care must be taken to avoid air bubble entrapment.

- **Drying**
 - Prints should be allowed to level at room temperature for 5-10 minutes and then dried for 10 minutes at 150°C.
- **Firing**
 - Dried prints should be fired in a belt furnace. Use a 30-minute cycle with a peak temperature of 600-620°C for 5-10 min.

Chart 1 – Firing Profile

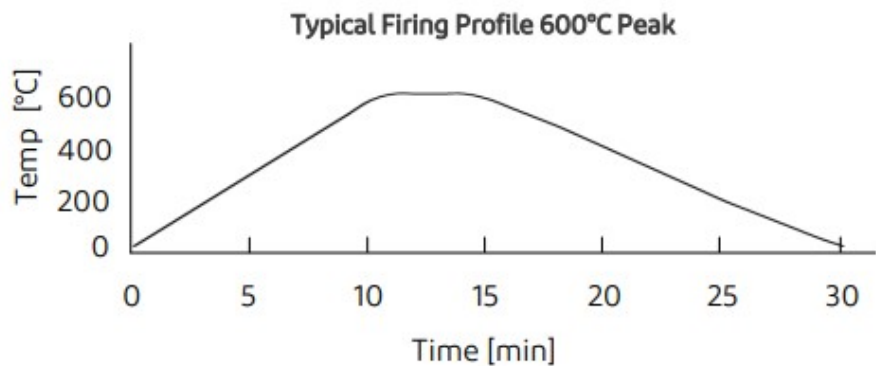
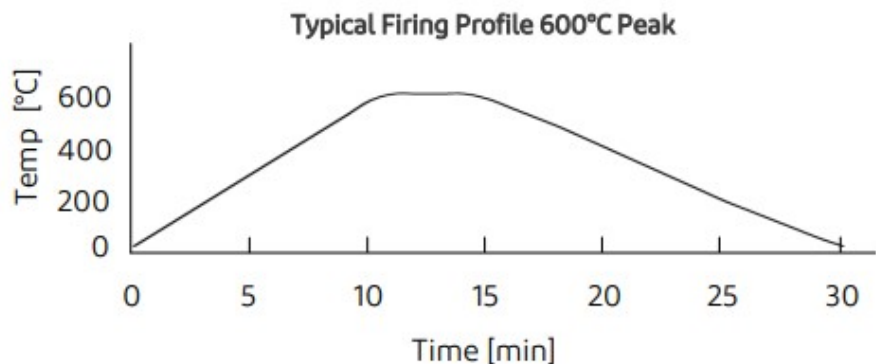


Chart 1 – Firing Profile



Properties

- Information in this datasheet shows anticipated typical physical properties

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for Micromax™ 5478 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.

Safety and handling

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