

# Micromax™ 5436F

## Microcircuit and Component Materials

### Glass Encapsulant

Micromax™ 5436F is a screen printable low temperature firing, protective glass encapsulant for chip resistors.

### Product Benefits

- Acid resistant - withstands acidic nickel plating conditions
- Low firing temperature: 620 °C to 640 °C at 30 minutes profile.
- Less influence on resistor
- Excellent printability
- Black color
- 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      | 75 - 81 %      |

### Rheological properties

|           |                               |
|-----------|-------------------------------|
| Viscosity | 200 - 290 <sup>[1]</sup> Pa.s |
|-----------|-------------------------------|

[1]: Brookfield HBT, UC&SP, 10 rpm

### Application technique

|                                   |            |
|-----------------------------------|------------|
| Mask mesh                         | 325        |
| Drying time                       | 10 min     |
| Drying temperature                | 150 °C     |
| Recommended film thickness, dried | 18 - 20 µm |
| Recommended film thickness, fired | ≥10 µm     |
| Leveling time                     | 5 - 10 min |

### Storage and stability

|            |                         |
|------------|-------------------------|
| Shelf life | 6 <sup>[2]</sup> 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 325-mesh stainless

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steel screen to give a minimum fired thickness of 10µm.

- Encapsulant composition Micromax™ 5436F 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 620-640°C for 5-10 min.

### Properties

- Information in this datasheet shows anticipated typical physical properties for Micromax™ 5436F 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).