

Micromax™ 5477

Electronic Inks & Pastes

PRODUCT DESCRIPTION

Glass Encapsulant

Micromax™ 5477 is a screen printable, laser trimmable, air-fired G1 glass encapsulant for chip resistors.

Product benefits

- Optimized viscosity for higher printing speed
- Acid resistant - withstands acidic nickel plating conditions
- G1 encapsulant for chip resistors
- Green colored, laser trimmable
- 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.

READ ENTIRE TECHNICAL DATA SHEET BEFORE USING THIS PRODUCT

PRODUCT INFORMATION

General Properties	Value Unit
Application	Encapsulant
Color	Green
Solvent or thinner	Micromax™ 8218
Solid content	63 to 69 %

TECHNICAL DATA

Rheological Properties	Value Unit
Viscosity ¹	120 to 180 Pa.s

Application Technique	Value	Unit
Mask mesh ²	200 to 325	
Drying time	10	min
Drying temperature	150	°C
Recommended film thickness ³	16 to 18	µm
Recommended film thickness ⁴	8 to 9	µm
Leveling time	5 to 10	min
Storage and Stability	Value	Unit
Shelf life ⁵	6	months

¹Brookfield HBT, SC4-14/6R, 10 rpm, 25°C

²Screen Types: Stainless steel

³250-mesh stainless steel screen

⁴250-mesh stainless steel screen

⁵in unopened containers, from date of shipment, stable environment at room temperature between 5°C - 30°C

PROCESSING GUIDELINES

Screen types

200 - 325 wire/inch stainless steel mesh

77 - 120 thread/cm polyester mesh

Printing

Print to a dried thickness of 16-18µm with a 250-mesh stainless steel screen to give a fired thickness of 8-9µm. Encapsulant composition Micromax™ 5477 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.

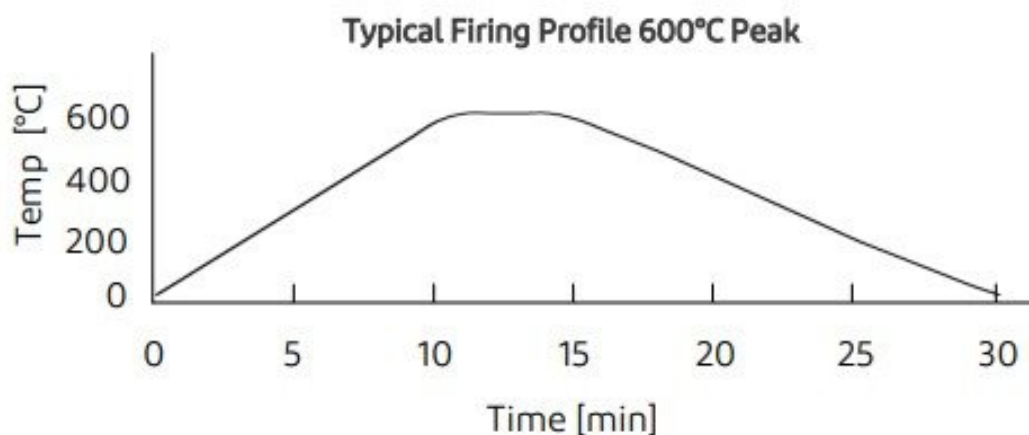
Drying

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



Properties

Information in this datasheet shows anticipated typical physical properties for Micromax™ 5477 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 between 5°C - 30°C. Shelf life of material in unopened containers is 6 months from date of shipment. Some settling of solids may occur and compositions should be thoroughly mixed prior to use.

Storage conditions on the product data sheets are intended to represent long-term material storage recommendations and not a shipping or temperature-at-receipt requirement.

Transportation: Under normal shipping conditions, without temperature control, Micromax™ products are not expected to exhibit a change in quality or fitness for use. Should extraordinary events result in extended transportation periods, Micromax™ recommends customers confirm products remain suitable for the intended application.

SAFETY & WARNING

It is recommended that the company/operator read and review the Safety Data Sheets for the appropriate health and safety warnings before use.

Safety Data Sheets are available.

WASTE TREATMENT

Prior to using any recommendations or suggestions for waste treatment, the user is required to know the appropriate local/state/federal regulations for on-site or off-site treatment which may require permits. If there is any conflict regarding our recommendations, local/state/federal regulations take precedence.

CONTACT INFORMATION

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Also read carefully warning and safety information on the Safety Data Sheet. This data sheet contains technical information required for safe and economical operation of this product. READ IT THOROUGHLY PRIOR TO PRODUCT USE. Emergency safety directory assistance: US 1 202 464 2554, Europe + 44 1235 239 670, Asia + 65 3158 1074, Brazil 0800 707 7022 and 0800 172 020, Mexico 01800 002 1400 and (55) 5559 1588

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