

Micromax™ 5424

Electronic Inks & Pastes

PRODUCT DESCRIPTION

Platable C1 Termination for Chip Resistors Applications

Specially developed for chip resistors applications, Micromax™ 5424 is a high performance platable silver/palladium C1 termination.

Product characteristics

- High resolution screen printing
- High green strength
- Fast firing — 850°C/30min. profile
- High acid resistance
- Excellent post-plating adhesion
- Cadmium free
- 2% palladium content

READ ENTIRE TECHNICAL DATA SHEET BEFORE USING THIS PRODUCT

PRODUCT INFORMATION

General Properties	Value Unit
Application	Resistor termination
Solvent or thinner	Micromax™ 4553

TECHNICAL DATA

Rheological Properties	Value Unit
Viscosity ¹	150 to 250 Pa.s

Application Technique	Value Unit
Mask mesh	250
Mask emulsion	8 µm

Application Technique	Value	Unit
Drying time	10	min
Drying temperature	150	°C
Recommended film thickness	16 to 20	µm
Leveling time	5 to 10	min

Storage and Stability	Value	Unit
Shelf life ²	6	months

¹Brookfield HBT, UC&S, 10 rpm, 25°C ± 1°C

²in unopened containers, from date of shipment, stable environment at room temperature between 5°C - 30°C

PROCESSING GUIDELINES

Substrates

Reported properties are based on tests with 96% alumina substrates. Substrates of other compositions may yield variations in performance properties.

Printing

Properties are based on Micromax™ 5424 printed to 18±2µm dried print thickness using 250 mesh stainless steel screen with an emulsion thickness of approximately 8µm.

Thinning

Micromax™ 5424 is optimized for screen printing and thinning is not normally required. For minor adjustments, thinner Micromax™ 4553 is recommended.

Clean-up solvent

While traditional screen cleaners work with Micromax™ 5424, Axarel® 2200, a non CFC alternative, is recommended.

Drying

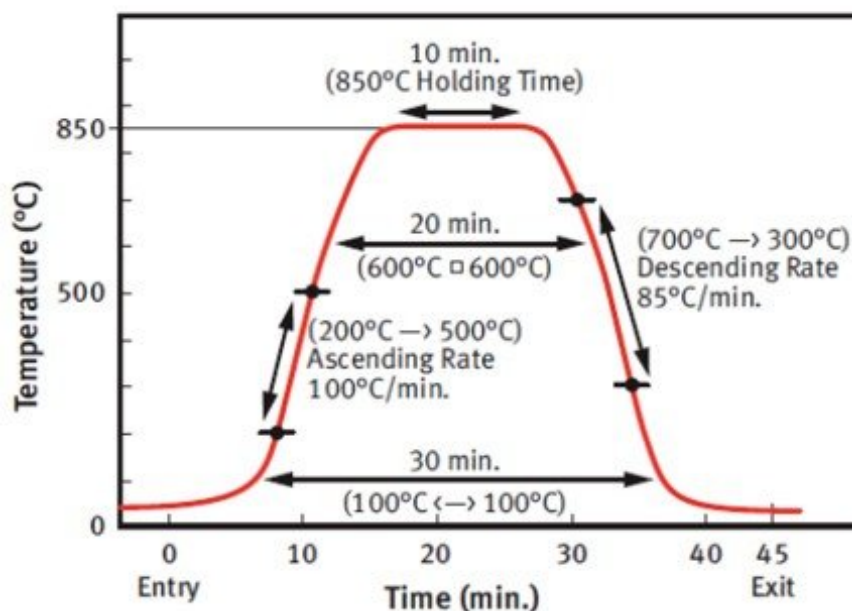
Prints should be allowed to level at room temperature for 5-10 minutes and then dried for 10 minutes at 150°C.

Firing

Properties are based on a 30 minute firing cycle with 10 minutes at a peak of 850°C. Equivalent performance is obtained on a 60 minute firing cycle with 10 minutes at a peak of 850°C.

Micromax™ Standard Profile 850°C x 10 min., 30 min.

(Micromax™ QA Profile)



Properties

Information in this datasheet shows anticipated typical physical properties for Micromax™ 5424 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 and handling

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

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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