Micromax™ PE830

Electronic Inks and Pastes

Silver Conductor Paste

Micromax™ PE830 is a flexible, high resilience low temperature drying silver conductor paste. Suitable for low-voltage consumer electronic applications, Micromax™ PE830 can withstand extreme bend requirements and is stable on substrates that are processed at low temperatures. Due to its unique rheology, this paste can be either dispensed or screen printed.

Product benefits

- Extreme bend resilience
- Stable low resistance
- Stable conductivity throughout processing and use
- Excellent adhesion to a variety of substrates; such as polyester, polyimide, metal/metal oxide surfaces
- Low temperature drying process
- Strong adhesion to metal surfaces
- High temp/humidity stability

Product information

Solvent or thinner	Micromax™ 8210	
Solid content	65 - 75[1]	%

[1]: 150 °C

Rheological properties

Viscosity	13 - 23[2]	Pa.s

[2]: Brookfield RVT, #14 spindle, 10 rpm, 25 °C

Application technique

Drying time	15[3]	min
Drying temperature	130[3]	°C

[3]: thickness < 20µm

Typical mechanical properties

Adhesion, pull tape	no material transfer[4]	class

[4]: 3M Scotch Tape #600

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Electrical properties

Surface resistivity	≤25[5]	mOhm per square

[5]: at 25.4µm

Storage and stability

Shelf life	6[6]	months

[6]: in unopened containers, from date of shipment, at temperature <25°C

Additional information

How to use

Processing

- Applications
  - Screen printing, dispensing, or dip coating
- Printing
  - Some settling of solids may occur and compositions should be thoroughly mixed prior to use. Printing should be conducted in a clean, well-ventilated area.
- Thinning
  - Thinning may be desired in some cases depending on printing requirements, please contact Micromax™ representative for the recommended thinner for slight rheology adjustments.
- Clean-up solvent (screens/nozzle)
  - Ethylene diacetate or Methyl proposal acetate
- Drying
  - Equipment dependent
  - Dry at 65°C for 1hr; thickness < 20µm
  - Dry at 130°C for 15 min; thickness < 20µm
- Coverage

	(inch^2/gr)	(cm^2/gr)
Coverage @ 6.9 µm	40.1	259.0
Coverage @ 12 µm	23.1	148.9

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.

Lifetime in syringe

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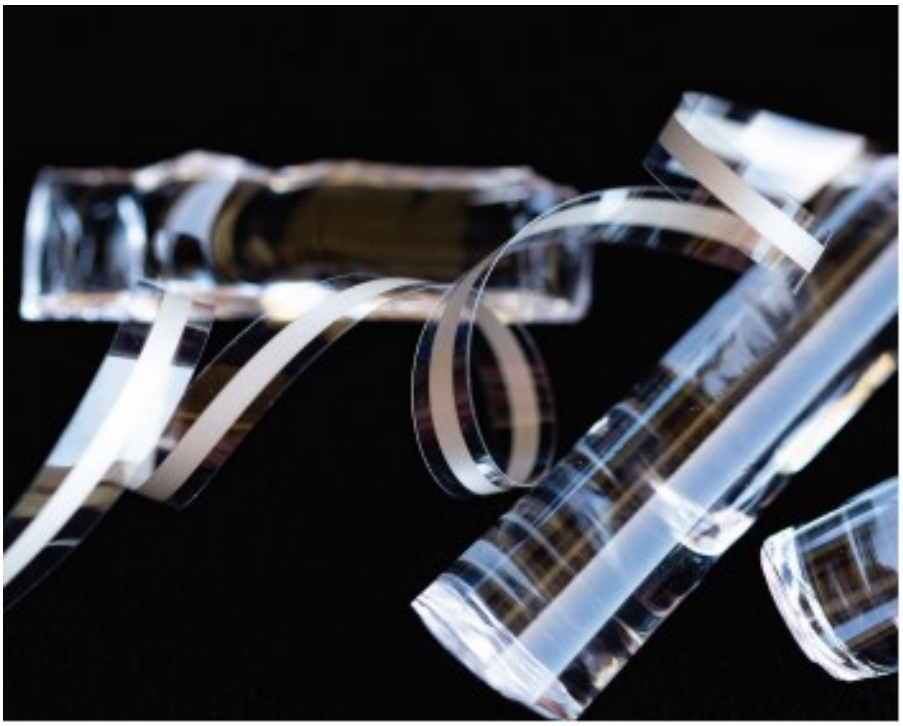
Syringes should be used in a clean, stable environment at room temperature (<25°C). Shelf life of material in a syringe is week from the date of applied into syringe.

Safety and handling

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



Applicable uses (not limited to): High conductivity applications, flexible electronic applications, bendable screens, etc.

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