

MIDLAND METROLOGY LIMITED

Hot Mounting Powder



Introduction: In order to obtain the best results, the samples should be cleaned before mounting, without oil or other contaminants on the surface, to ensure the best adhesion of the resin to the sample. Hot Mounting, as the name suggests, is the embedding of the sample in the resin by means of hot pressing and is particularly suited to laboratories that have a constant need for sample preparation with flat surfaces, regular dimensions, easy handling, short time-consuming and economical.

Hot Mounting Powder Comparison Chart

Name	PR Mounting Powder	GC Mounting Powder	EP Mounting Powder	TM Mounting Powder
Heat time	4~6 mins	4~6 mins	4~6 mins	25 mins
Cooling time	2~3 mins	4~6 mins	2~3 mins	15 mins
Pressure	100~300 bar	100~300 bar	100~150 bar	150 bar
Heat TEMP	150~180 °C	150~180 °C	140~180°C	140±5 °C
Hardness	85~90 Shore D	90~92 Shore D	90~93 Shore D	85~87 Shore D

*Date is based on the diameter of 30 mm heating mold, for reference only.

PR-B/G/R Phenolic Resin Hot Mounting Powder

Application: For routine applications suit for most products.

Material: Phenolic resin, bakelite powder.



Technical Specification

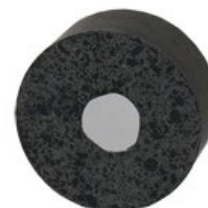
Color: Black, Green, Red

Package: 500g/Bottle, 2000g/Bottle, 4000g/Bottle, 18000g/Bottle

GCB Graphite Conductivity Hot Mounting Powder

Application: Suitable for conductive samples such as: for electron microscopy, electrolytic polishing, SEM analysis.

Features: Excellent conductive, voltage loss almost eliminated completely.



Technical Specification

Color: Black

Package: 500g/Bottle, 2000g/Bottle, 4000g/Bottle, 18000g/Bottle

Hot Mounting Powder

EPB Edge Protection Hot Mounting Powder

Application: Samples with high edge requirements.

Features: Black color, extremely low shrinkage. Tightly combined with the sample, with high hardness, good abrasion resistance.



Technical Specification

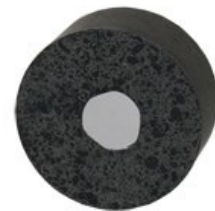
Color: Black

Package: 500g/Bottle, 2000g/Bottle, 4000g/Bottle, 18000g/Bottle

TM Transparent Acrylic Acid Hot Mounting Powder

Features: Transparent and very clear. allows easy sample observation.

Application: Complete embedding solution for thin layers, top layer for specimen labeling.



Technical Specification

Color: White Powder

Package: 500g/Bottle, 2000g/Bottle, 4000g/Bottle, 18000g/Bottle

Guidance for Hot Mounting Compound

Before sample mounting process, the grease on the sample needs to be removed so that the mounting resin can perfectly adhere to the surface of the sample. If burrs are generated during the cutting process, you can use sandpaper to remove the burrs on the edge of the sample.

Problem	Causes	Solutions
Bulge	Less cooling time	Increase the cooling times
Primer cracks	Oversized Coated part according to the chosen mounting mould	Reduce the size of the sample or increase the size of the mounting mould Choose less shrinkage resins
Shrinkage	Inadequate mounting resins	
	Insufficient heating time	Increase the temperature during the heating time
	Insufficient pressure	Increase the mounting pressure Increase pressure only during cooling cycle
"Smoke" visible	Wrong pressure choice	
	Too much resin than sample dimension	Reduce resin quantity or mold dimension
Resins grains visible	Insufficient heating time	Increase the heating time
	Insufficient pressure	Increase the pressure during the mounting cycle
	Insufficient heating time	Increase the heating time