

Water-Based Phenolic Inks

For Aerospace Applications

MAST Technologies is a formulator of custom-filled inks and coating materials for aerospace applications. MAST Technologies has developed a custom water-based phenolic ink for use in aerospace and military applications. The product utilizes an industrial waterborne phenolic resin, which was originally designed for pre-preg and laminates. This unique MAST coating material can be loaded with a variety of fillers including conductive carbon particles, high temperature fillers, and low dielectric fillers. MAST Technologies has a 50 gallon ball mill, so large batch manufacturing may be accomplished.



TYPICAL PROPERTIES

Solvent	Water
Type	phenol-formaldehyde
Non-Volatiles	>90%*
Storage Life	6 months at 40 deg F
Formaldehyde	1.5% Maximum

* may vary with specific ink formulation

TYPICAL FILLER TYPES

Conductive Carbon:
100—1200 Ω /sq (3 mil wet drawdown)
EMI Shielding Conductive Particles:
< 30 m Ω * cm

TYPICAL PROPERTIES

Viscosity:	10 - 50 cP
Cure Method:	Room Temp, Oven, Heat Blanket, vacuum bag
Environmental:	Weather, jet fuel, hydraulic fluids, alcohols, acids, aromatic hydrocarbons

AVAILABILITY

Formats:	Quart Cans
	Gallon Cans
	30 or 55 Gallon Drums

APPLICATIONS

Aerospace coatings
Survivability coatings
EMI Shielding
High Temperature Applications
Treatment of foams or honeycomb materials

MIXING EQUIPMENT

0.5 gallon roller jar mill
1.5 gallon roller jar mill
50 gallon Abbe ball mill



50 Gallon Ball Mill

METHOD OF APPLICATION

Sprayed via HVLP sprayer
Dipped
Flow Coated

CURE PARAMETERS (typical)

300°F for 30—150 minutes
Post cure at 500°F

Please contact a MAST Technologies Technical Representative to discuss your specific application. Visit www.masttechnologies.com for more about capabilities.

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All information on this data sheet is based on laboratory testing and is not intended for design purposes. MAST Technologies makes no representations or warranties of any kind concerning this data.

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