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CERMET DIELECTRIC

M4024-A

Dielectric Designed to be Co-fired with Air-Fireable Nickel

ESL M4024-A is an black dielectric designed for D.C. gas discharge display panel applications. The M4024-A can be co-fired with nickel cathodes. It has a firing range of 580°C-625°C with a cycle time of 1 hour (up to 3 hours).

PASTE DATA

RHEOLOGY:	Thixotropic, screen printable paste
VISCOSITY: (Brookfield RVT, ABZ Spindle, 10 rpm, 25.5°C±0.5°C)	350±50 Pa·s
SHELF LIFE: (25°C)	6 months

PROCESSING

SCREEN MESH/EMULSION:	200/38 µm
LEVELING TIME: (25°C)	5-10 minutes
DRYING AT 125°C:	10-15 minutes
FIRING TEMPERATURE:	580°C-625°C
OPTIMUM:	580°C
TIME AT PEAK:	10 minutes
FIRING CYCLE:	up to 3 hours
RATE OF ASCENT/DECENT:	60°C-100°C/minute
SUBSTRATE OF CALIBRATION:	soda lime glass
THINNER:	ESL 401

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ESL Affiliates

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See Caution and Disclaimer on other side.

TYPICAL PROPERTIES

FIRED THICKNESS: (3 layers, co-fired)	50±10 µm
DIELECTRIC CONSTANT:	10±2
VOLTAGE BREAKDOWN: (at 25 µm thickness)	> 280 VDC
INSULATION RESISTIVITY:	> 10 ¹⁰ Ω
CONDUCTOR COMPATIBILITY:	2554-N-1

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CAUTION: Proper industrial safety precautions should be exercised in using these products. Use with adequate ventilation. Avoid prolonged contact with skin or inhalation of any vapors emitted during use or heating of these compositions. The use of safety eye goggles, gloves or hand protection creams is recommended. Wash hands or skin thoroughly with soap and water after using these products. Do not eat or smoke in areas where these materials are used. Refer to appropriate MSDS sheet.

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