

# Electro-Science Laboratories, Inc.

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## **CERMET THERMISTOR SYSTEM**

# PTC-2600 SERIES

The PTC-2600 Series of thermistor pastes are designed for making positive temperature coefficient thermistor films. The materials are designed for applications for which thermistors are required to be intimately bonded to the substrate. The materials are useful in applications where temperature compensation of hybrid circuits and fast response sensors is required. When used as temperature sensors, a linear response is obtained from ambient to temperatures in excess of 300°C. The PTC-2600 Series may be used to replace discrete thermistor components with the advantage of reduced size and lower cost.

### **PASTE DATA**

RHEOLOGY: Thixotropic, screen printable paste

VISCOSITY:

(Brookfield RVT, 10 rpm, ABZ spindle, 25.5°C±0.5°C) 200±30 Pa⋅s

SHELF LIFE: (20°C) 6 months

#### **PROCESSING**

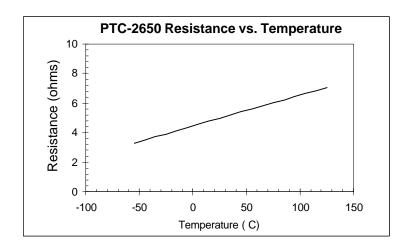
**SCREEN MESH/EMULSION:** 200/18.0 μm **LEVELING TIME: (20°C)** 5-10 minutes DRYING AT 125°C: 10-15 minutes FIRING TEMPERATURE: (in air) 850°C TIME AT PEAK TEMPERATURE: 10 minutes RATE OF ASCENT/DESCENT: 50°C-60°C/minute SUBSTRATE FOR CALIBRATION: 96% alumina RECOMMENDED TERMINATION: 9912-A (Ag) THINNER: **ESL 401** 

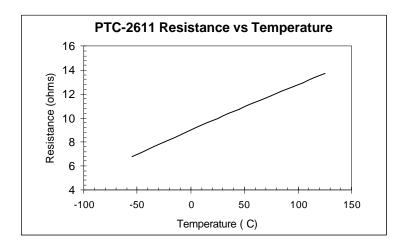
PTC-2600 9711-C

## **TYPICAL PROPERTIES**

**DRIED PRINT THICKNESS:** (on 96% alumina) 22.5±2.5 μm

	<b>RESISTIVITY</b>	HOT TCR, ppm/°C	COLD TCR, ppm/°C
		(+25°C to +125°C)	(-55°C to +25°C)
PTC-2650	5 Ω/sq.±10%	+4000±500	+4000±500
PTC-2611	10 Ω/sq.±10%	+4100±500	+4100±500





#### PTC-2600 9711-C

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.

DISCLAIMER: The product information and recommendations contained herein are based on data obtained by tests we believe to be accurate, but the accuracy and completeness thereof is not guaranteed. No warranty is expressed or implied regarding the accuracy of these data, the results obtained from the use hereof, or that any such use will not infringe any patent. Electro-Science assumes no liability for any injury, loss, or damage, direct or consequential arising out of its use by others. This information is furnished upon the condition that the person receiving it shall make their own tests to determine the suitability thereof for their particular use, before using it. User assumes all risk and liability whatsoever in connection with their intended use. Electro-Science's only obligation shall be to replace such quantity of the product proved defective.