

## IP9117

### Dielectric / Glaze

#### Description

IP9117 is a permanent blue 850 °C firing dielectric composition, displaying the following benefits:

#### Key Features

- Expansion coefficient is closely matched with that of alumina, to provide for minimal substrate bowing
- Extremely dense, hermetic fired film allows for excellent electrical performance at a fired thickness of  $\geq 40 \mu\text{m}$
- Excellent solderability and adhesion of Ag, Ag/Pd, Ag/Pt, Au and Au/Pt conductors on top of dielectric
- Excellent wire bondability of gold conductors on top of dielectric
- Resistors can be processed on top of dielectric
- Absence of the "Battery Effect"<sup>3</sup>



*This picture does not show the packaging of IP9117 and is solely intended for illustration purposes. The products are available in different packaging configurations and may change over time. Please refer to the latest safety data sheets for safety-relevant pictograms.*

#### Typical Properties

Viscosity	30 – 50 Pas (25 °C, D = 75/s)
Solids	
Blendable	
Coverage	c. 70 cm <sup>2</sup> /g (40 $\mu\text{m}$ FFT)
Color	

#### Recommended Processing Guide

Printing Parameters	Print individual layers with a 200 – 325 mesh stainless steel screen. For best via resolution, a 325 mesh screen is recommended; whenever possible, a double wet pass of the squeegee is advised, to minimize pin holes.
Printing Speed	
Leveling	
Drying Temperature	Dry at 150 °C for 10 – 20 minute
Process Temperature (TDS)	All layers of the interconnected structure should be fired separately. Fire in air, with a 30 – 60 minute cycle to a peak temperature of 850 °C.
Film Thickness	$\geq 40 \mu\text{m}$ (3 separately fired layers)
Recommended Thinner	HVS-100
Paste Compatibility	

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#### Warranty

6 months

#### Storage

store in a dry, cool (5 – 25 °C) and dark place with container tightly shut

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