

Technical Data Sheet



Product Type: Polymer Thick Film

Product Name: PD5220 Black, Blue & White



Epoxy Insulator

Description

PD5220 is a screen printable, single component, fast curing modified epoxy coating used for circuit protection and identification. This cover coat, when properly cured, yields a chemically inert film which will not react with circuit components. PD5220 provides excellent adhesion to a variety of substrate materials.

Key Benefits

- REACH¹ and RoHS² compliant
- Screen printable
- Fast curing
- Yields a chemically inert film which will not react with circuit components
- Excellent resistance to SAC305 solder at 250 °C
- Excellent resistance to multiple solvents
- Available in Black, Blue and White

Typical Properties

Insulation Resistance:

≥ 1 x 10¹⁰ ohms

Dielectric Breakdown Voltage:

> 1,000 volts/mil

Non-Volatile: (1Hr @ 150 °C)

98.0 % ± 2.0 %

Viscosity:

50 – 100 Kcps, Brookfield HBT, SC4-14 spindle and 6R utility cup @ 10 rpm, 25 °C

Dielectric Constant:

Black: 12 – 14

Blue: 8 – 10

White: 11 – 13

Recommended Processing Guidelines

Printing:

280 mesh stainless steel screen
0.5 mil emulsion

Curing:

30 – 60 minutes @ 150 °C

Cured Thickness:

20 – 30 microns per layer with 2 layers recommended totaling 40 – 60 microns

Thinner:

RV-252

Warranty:

Material guaranteed to meet specifications for 6 months from date of shipment

Handling & Precautions:

Use in a well-ventilated area.
Avoid contact with skin.
Wash with soap and water.

For cleanup of uncured epoxy material, a one-to-one mixture of Methyl Ethyl Ketone (MEK) and Toluene is recommended

Storage:

REFRIGERATE at 5 °C – 10 °C to ensure proper performance of shelf life.

Allow paste to come to room temperature prior to opening.
Spatulate well before using, as settling may occur during storage.

SPECIAL NOTE:

Some of these materials may show resistance shifts due to thermal storage. Stability baking has been shown to minimize this behavior.

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Legend:

1) REACH compliant according to the latest ** Annex XIV to Regulation (EC) of the European Parliament and of the council on the Registration, Evaluation, Authorisation and Restriction of Chemicals ("REACH") by European Chemicals Agency and its subsequent amendments; the material does not contain any substance listed in Annex XIV.

2) RoHS compliant according to the latest ** Directives (European Union) of Restriction of Hazardous Substances ("RoHS") and its subsequent amendments (including the exceptions related to Pb)

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