

Technical Data Sheet

9432

Version: B2 (20220616)

9432 is a low-odor, transparent, highly flexible, high-performance modified polyurethane conformal coating/resin paint which features no aromatic solvent, low odor, environmental friendliness, and excellent circuit board protection property, especially for boards working in high humidity. 9432 has excellent adhesion to all kinds of boards, as well as a wide working temperature range, excellent insulation property and good water and moisture resistance. 9432 contains fluorescent indicator which facilitates observation and inspection. The product meets RoHS, REACH, halogen-free and other environmental requirements.

Typical applications

Protecting circuit boards and various electronic components against water, moisture, dust, mold growth and salt spray, insulation protection, etc.

Certification

RoHS 2.0 Compliant: Yes

MIL Approval: Compliant IPC-CC-830B: Compliant UL Approval: E310258
Reach Compliant: Yes

Halogen Compliant: Yes

Liquid properties

Typical value

Appearance: Transparent, brown-yellow liquid

Viscosity, mPa.s: 100
Density, g/cm³: 0.880
Solid content: 43%
Tack-free time: 12-17min

Recommended curing time: 24hrs@20°C

4hrs@60°C

2hrs@90°C

Paint film propertie

Typical value

Appearance: Transparent film

Flexibility: < 2mm

Operating temperature: -65°C to 130°C
Flame resistance: UL94V-0 compliant

Surface resistance: > 10¹³ Ohms

Dielectric pressure resistance (IPC-CC-830B)

Thermal cycling (IPC-CC-830B)

Compliant

Compliant

Moisture resistance (IPC-CC-830B) Compliant Salt spray (neutral salt spray ≥96h) Compliant

Directions for use

Guide for use: 9432 can be applied via spray coating, dip coating or brush coating. The application environment should be well ventilated. Ambient temperature below 16°C or humidity above 70% is not suitable for application. Before application, the substrate should be thoroughly cleaned to remove residual fluxes and other contaminants, so that the conformal coating/resin paint can well cover and protect the substrate. 9432 dry film can be repaired with a remover such as Huitian 1060.

For polyurethane-type conformal coating/resin paint, when the circuit board is assembled together with galvanized or nickelized special metal components, the paint film should be completely cured. It is recommended to dry the coated sample board in an 80°C aging oven for 2 hours and cooling it before assembly. The storage place should be ventilated, with humidity < 50%, so that the galvanized and nickelized special metal components will not be corroded. Or these special metal components should undergo special protection treatment, etc. **Spray coating:** According to different spraying equipment and application environments, the product can be diluted with 1040 as per a certain ratio before spraying to obtain a suitable dry film thickness.

Dip coating: According to the requirements, after diluting with 1040 as per a certain ratio, dip the sample board vertically in the liquid for about 10s until the bubbles on the board surface disappear, and then slowly take out the sample board. Brush coating: According to the requirements, dilute the product with 1045 as per a certain ratio and then conduct brush coating to obtain a suitable dry film thickness. Inspection: 9432 contains UV indicator which facilitates the inspection of the coating effect of the sample board.

Cautions

Keep away from children for storage. Unused product should be stored in a sealed container with dry nitrogen.

Avoid mouth and eyes from being exposed to the product.

Please consult the MSDS of the product for safety information.

Packing specification

Order code: 943202 5L/barrel, 2 barrels/carton

Storage

Store at 8-28°C in a cool and dry place.

Shelf life is 12 months.

Special note

The data in this TDS were obtained under laboratory conditions. Due to differences in the use environment, users should perform analysis and testing by referring to these data and use conditions. Huitian New Material does not guarantee no problem in the sale of Huitian products and in the use of Huitian products under specific working conditions, and does not assume any responsibility for direct, indirect or accidental losses. In case of any problems during use, please contact the Technical Service Department of Huitian New Material, and we will give you all the help you need.

