

Description

PD955PR is a thermosetting single component, solvent free polymer adhesive developed especially for the surface mount of SMT components onto PCBs and for use on bare substrates. This rheology is especially adapted for printing applications with thick stencils.

Special advantages

- Ideal, high dot form and excellent consistency of the glue dots.
- Specially developed for printing with thick stencils.
- Very high green strength prevents component movement during placement.
- Forms stable glue dots.
- Excellent adhesion with standard and also with the difficulty to glue components.
- Very low humidity absorption. Steep temperature increases and very short curing times are possible without danger of formation of air bubbles or worse adhesion.
- High surface insulation resistance.(SIR)

Physical characteristics

Color: red

Density: 1.2 g/cc

Homogeneity: no particle >50 micron

Adhesion: > 25 N/mm²
at room temperature

after curing in conventional box oven, 5 min /125°C,
Cu-nail on SO component with a low-stress encapsulation compound.

Viscosity:

Shear rate D Viscosity (ascending curve)

[s ⁻¹]	[Pa·s]
30	40-90

Cone/plate, without border, 2° cone,
temperature: 23°C

Processing:

The adhesive is suitable for printing with metal and plastic stencils

- (1) Zestron HC, Es, SD, FA and LP are products Zestron Corp.
- (2) Zestron HC in Aerosol spray cans is being exclusively distributed by Heraeus

Note: The information contained in this data sheet is based on typical properties for the product. Actual shipment specifications for the product may vary. Please contact Heraeus for the product's shipment specifications.

FH0399.2

PD955PR

Thermosetting Polymer SMT- Adhesive for Printing Applications

Curing

The standard curing conditions are: 125°C/3 minutes. Max. curing temperature should not be higher than 200°C. The minimum* curing times are shown in the following table.

°C	100	125	150	180
minutes	8	3	1.5	1

* Optimal curing conditions depend on the curing oven.

Cleaning

Before curing:

In order to avoid an attack of the cleaning medium on the stencil frame adhesive, the use of a specially designed cleaner, ie. Zestron SD 300 is recommended.

When small dots are printed ≤ 0.5mm, or in the case of a bad contamination of the stencil with the glue, we recommend the use of Zestron ES for pre cleaning and afterwards with Zestron SD 300 for final cleaning. However, the cleaning with Zestron ES must be done very carefully, by hand, to avoid contact of Zestron ES with the stencil frame adhesive.

After curing:

Because of the known residual thermoplasticity of the cured adhesive, defective components can be easily replaced by heating (with hot air) the cured adhesive joint above 100 °C, then gently twist off component. After removing the component the hot air should be focused on the remaining adhesive in order to remove it with one sharp tool.

Storage

6 months in a refrigerator , at a storage temperature of 5-12°C.

Storage in a refrigerator is recommended..

Store syringes vertically, with tip down.

Remark:

Storage at temperatures >30°C should be avoided.

Warranty:

6 months from date of manufacture, in a refrigerator at a storage temperature of 5 - 12°C.