Product Information







Chemical test for localized detection of protective coating layer defects on electronic assemblies

The reliability of protective PCB assembly coatings, with regard to climate and harmful gas safety, is essentially determined by the uniform application of the coating without interferences or gaps in the protective layer. In particular, common trouble areas such as solder joint edges and pore channels in coating pooling areas, when lacking a proper coating layer, have detrimental effects on the final board assembly.

The ZESTRON[®] Coating Layer Test utilizes a black color reaction as a visual indicator of defects in the protective coating, even in the case of μ -coatings, adding standardized methods for coating thickness measurements with a rapid detection of defects in closed or dense coatings. The indicator liquid can also be used to check the readiness for solderability of components prior to soldering. Either application can be used during production for cost-effective sampling.

Simple Test Procedure in a Few Steps



Apply indicator



2) Wait for max. 3 minutes for color reaction



3) Rinse or dab off the indicator

Advantages Compared to Other Test Methods

- Quick, easy and cost-effective method
- More precise than black light/ UV inspection → thinner layers detectable
- Test is part of the validation specifications of automotive OEMs
- Shows coating defect and missing edge covering
- Avoids expensive cutting in the event of edge covering problems
- Can be used as a test for solderability (especially for THT components)

Application Area

Coatings:	Organic coatings/ Classical solvent coatings	μ-coatings based on perfluorinated compounds	Parylene	
Surfaces:	Tin	Copper	Nickel/ Nickel containing compounds	Other less noble metals such as ferrite and alloys

The ZESTRON[®] Coating Layer Test Includes the Following Accessories



- 1) ZESTRON[®] Coating Layer Test indicator
- 2) DI-water bottle
- 3) Gloves
- 4) Timer
- 5) Application and interpretation instructions (not displayed)