The Institute for Interconnecting and Packaging Electronic Circuits 2215 Sanders Road • Northbrook, IL 60062-6135



IPC-TM-650 TEST METHODS MANUAL

1 Scope This test method is used to determine the presence and effectiveness of the protective coating deposited over the PWB to prevent oxidation and facilitate good wetting during soldering operations. The coating is removed during soldering.

2 Applicable Documents None

3 Test Specimens

3.1 Any pre-production or production copper clad board at least 5 cm x 5 cm. The specimen must either contain circuitry or be completely copper clad. An uncoated bare copper clad specimen must also be available for control purposes.

4 Equipment/Apparatus

4.1 Reagent or commercial grade ferric chloride (42BE') etchant

- **4.2** Petrie dishes or glass trays
- 4.3 Stop watch

Number	
Subject Copper Protective Coating Quality	
Date 2/78	Revision
Originating Task Grou N/A)

4.4 Lint-free cloth

5 Procedure

5.1 Test

5.1.1 Place one drop of ferric chloride on several locations on the test specimens and the bare copper control specimens.

5.1.2 Allow to stand 10 seconds, then rinse with tap water and wipe dry.

5.2 Evaluation

5.2.1 Examine specimens and compare with bare control specimen. Test specimens must show no copper etching, proving the presence and effectiveness of protective coating.

6 Note Slight "mottling" or a slight attack on the coated surface indicates uneven deposition or insufficient solids of the coating.