



ASSOCIATION CONNECTING
ELECTRONICS INDUSTRIES

3000 Lakeside Dr.
Bannockburn, IL 60015

IPC-TM-650 TEST METHODS MANUAL

2.3.1 Chemical Processing, Suitable Processing Material

2.3.1.1B Chemical Cleaning of Metal Clad Laminates

2.3.2G Chemical Resistance of Flexible Printed Wiring Materials

2.3.3 Chemical Resistance of Insulation Materials

2.3.4B Chemical Resistance, Marking Paints and Inks

2.3.4.2A Chemical Resistance of Laminates, Prepreg, and Coated Foil Products, by Solvent Exposure

2.3.4.3 Chemical Resistance of Core Materials to Methylene Chloride

2.3.5B Density, Insulating Material

2.3.6A Etching, Ammonium Persulfate Method

2.3.7A Etching, Ferric Chloride Method

2.3.7.1A Cupric Chloride Etching Method

2.3.7.2A Alkaline Etching Method

2.3.8A Flammability, Flexible Insulating Materials

2.3.8.1 Flammability of Flexible Printed Wiring

2.3.9D Flammability of Prepreg and Thin Laminate

2.3.10B Flammability of Laminate

2.3.10.1 Flammability of Soldermask on Printed Wiring Laminate

2.3.11 Glass Fabric Construction

2.3.13A Determination of Acid Value of Liquid Solder Flux - Potentiometric and Visual Titration Methods

2.3.14 Print, Etch, and Plate Test

Number 2.3	
Subject Chemical Test Methods	
Date 12/07	Revision y
Originating Task Group	

2.3.15D Purity, Copper Foil or Plating

2.3.16B Resin Content of Prepreg, by Burn-Off

2.3.16.1C Resin Content of Prepreg, by Treated Weight

2.3.16.2 Treated Weight of Prepreg

2.3.17D Resin Flow Percent of Prepreg

2.3.17.1B Resin Flow of Adhesive Coated Films and Unsupported Adhesive Films

2.3.17.2B Resin Flow of "No Flow" Prepreg

2.3.18A Gel Time, Prepreg Materials

2.3.19C Volatile Content of Prepreg

2.3.21A Plating Quality Hull Cell Method

2.3.22 Copper Protective Coating Quality

2.3.23B Cure (Permanency) Thermally Cured Solder Mask

2.3.23.1A Cure (Permanency) UV Initiated Dry Film Solder Mask

2.3.24 Porosity of Gold Plating

2.3.24.1 Porosity Testing of Gold Electrodeposited on a Nickel Plated Copper Substrate Electrographic Method

2.3.24.2A Porosity of Metallic Coatings on Copper-Base Alloys and Nickel (Nitric Acid Vapor Test)

2.3.25C Detection and Measurement of Ionizable Surface Contaminants Supersedes 2.3.26 and 2.3.26.1

2.3.25.1 Ionic Cleanliness Testing of Bare PWBs

2.3.26A Superseded by Test Method 2.3.25

2.3.26.1 Superseded by Test Method 2.3.25

Material in this Test Methods Manual was voluntarily established by Technical Committees of IPC. This material is advisory only and its use or adaptation is entirely voluntary. IPC disclaims all liability of any kind as to the use, application, or adaptation of this material. Users are also wholly responsible for protecting themselves against all claims or liabilities for patent infringement.

Copyright IPC-Association Connecting Electronics Industries
Provided by IHS under license with IPC
No reproduction or networking permitted without license from IHS

Full document details: IPC TM-650 2.3 2007

Licensee=Sandia National Lab/5932237100, User=sam, albert
Not for Resale, 05/28/2014 10:52:08 MDT



Documents
Page 1 of 2
Document Sharing Hub

IPC-TM-650		
Number 2.3	Subject Chemical Test Methods	Date 12/07
Revision y		

2.3.26.2 Mobile Ion Content of Polymer Films

2.3.27 Cleanliness Test – Residual Rosin

2.3.27.1 Rosin Flux Residue Analysis – HPLC Method

2.3.28A Ionic Analysis of Circuit Boards, Ion Chromatography Method

2.3.28.1 Halide Content of Soldering Fluxes and Pastes

2.3.29 Flammability, Flexible Flat Cable

2.3.30A Solvent pH Determination in Anhydrous Fluorocarbons Solvents

2.3.31 Relative Degree of Cure of U.V. Curable Material

2.3.32D Flux Induced Corrosion (Copper Mirror Method)

2.3.33D Presence of Halides in Flux, Silver Chromate Method

2.3.34C Solids Content, Flux

2.3.34.1 Percentage of Flux on/in Flux-Coated and/or Flux-Cored Solder

2.3.35C Halide Content, Quantitative (Chloride and Bromide)

2.3.35.1A Fluorides by Spot Test, Fluxes - Qualitative

2.3.35.2A Fluorides Concentration, Fluxes - Quantitative

2.3.36 Acid Acceptance of Chlorinated Solvents

2.3.37B Volatile Content of Adhesive Coated Dielectric Films

2.3.38C Surface Organic Contaminant Detection Test

2.3.39C Surface Organic Contaminant Identification Test (Infrared Analytical Method)

2.3.40 Thermal Stability

2.3.41 Test Method for Total Halogen Content in Base Materials

2.3.42 Solder Mask - Resistance to Solvents & Cleaning Agents