

CY-516 PAINT FAILURE ANALYSIS

Trouble Shooting: Common paint film defects, causes of paint defects.

Common Failure Modes: Mechanical stress, internal stress, chemical attack, weathering stress, osmotic blistering, electroendosmotic blistering, application-related problems, case studies of paint and coating failures.

Types of Failures: Adhesion, flexibility and impact resistance, solvent resistance, weathering resistance, chemical resistance, Freeze–Thaw, application variables.

Analytical Methods: Infrared Spectroscopy (IR), Gas Chromatography (GC), Gel Permeation Chromatography (GPC), Ion Chromatography, Scanning Electron Microscopy (SEM), Differential Scanning Calorimetry (DSC), miscellaneous methods of analysis.

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