

Abstract for Technical Paper

16th INTERNATIONAL CORROSION CONGRESS

Beijing September 2005

Title: Intercept Technology, a New Frontier in Packaging

Telecommunication products are being deployed in increasingly aggressive corrosive atmospheres as equipment is moved out of the central offices and closer to the customer. The European RoHS directive mandates the elimination of hexavalent chromium from plated metals, and Pb from solder. These issues leave the products significantly more susceptible to corrosion. Lucent Technologies Bell Laboratories has developed a material (Trade name Intercept Technology™) that combines contamination free long-term corrosion protection with permanent ESD protection. Intercept Technology™ consists of a blend of polymers (e.g. polyethylene, polypropylene, and styrene) co-valently bonded with corrosive gas neutralizing proprietary catalyzed additives. The resulting permanently anti-static material imparts an unequalled ability to neutralize corrosive gases for extended periods of time, creating clean microenvironments within the Intercept environment. This material is also non-outgasing and clean of ionic species. It can be manufactured into bags, tubing, sheets, foam, plastic corrugate, paperboard boxes, etc. Protection from atmospheric corrosion by H₂S, COS, and HCl for such things as electronic components, pre/post plated cabinets, housings, electronic assemblies, and export shipping of metallic systems is provided. This paper will review various tests and case studies (including solderability testing) compared to traditional packaging systems.

Submitted by:

Keith Donaldson
President
Engineered Materials, Inc.
113 McHenry Rd, #179
Buffalo Grove, IL 60089 USA

Phone: + (1) 847-821-8280
Fax: + (1) 847-821-8260
Email: emipres@aol.com
Website: www.StaticIntercept.com

Henry Tan
Tec-Hub Pte Ltd.
61 Kaki Bukit Ave 1, #04-07
Shun Li Industrial Park
Singapore 417943

Phone: +(65) 6547-0605
Fax: +(65) 6234-0263
Email: intercept@tec-hub.com
Website: www.intercepttechnology.com