

# DURABILITY OF ADHESIVE JOINTS

## Introduction

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In 1952 ASTM Committee D-14 sponsored a symposium on "Testing Adhesives for Durability and Permanence." Several of the reasons for holding the previous symposium apply for the present symposium on "The Durability of Adhesive Joints":

1. Adhesive users want to know how long an adhesive will perform satisfactorily in a given use.
2. Many adhesives now being used have been developed in recent years so that insufficient data are available as to their durability in various uses.
3. Accelerated tests for durability are important to the resin manufacturer, the formulator, and the end user for efficient development of improved adhesives.

Relatively recently it has been recognized that the combined effects of stress and moisture reduce drastically the durability of many structural adhesive joints.

The aim of this symposium is to present new test methods and data on the durability of adhesive joints, as well as some general ways to treat durability data in order to determine approximate reliability of adhesive joints. Hopefully this symposium will lead to new standard test methods and to a stimulation of scientists and technologists to develop new theories and tests for the durability of adhesive joints.

The symposium committee consisted of the following: G. F. Carter, E. I. du Pont de Nemours & Co., Inc., chairman; N. J. DeLollis, Sandia Corp.; R. M. Kell, Battelle Memorial Inst.; R. E. Kreibich, Weyerhaeuser Co.; M. Petronio, Frankford Arsenal; and L. H. Sharpe, Bell Telephone Co.

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