

Physical testing of rubber —

Part A21: Determination of rubber to metal bond strength —

Section 21.1: Adhesion to rigid substrates — 90° peel method

ICS 83.060

NO COPYING WITHOUT BSI PERMISSION EXCEPT AS PERMITTED BY COPYRIGHT LAW



Document Sharing Hub

National foreword

This British Standard reproduces verbatim ISO 813:1997 and implements it as the UK national standard. Together with BS 903-A21.2:1997 it supersedes BS 903-A21:1989 which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee PRI/22, Physical testing of rubber, which has the responsibility to:

- aid enquirers to understand the text;
- present to the responsible international/European committee any enquiries on the interpretation, or proposals for change, and keep the UK interests informed;
- monitor related international and European developments and promulgate them in the UK.

A list of organizations represented on this committee can be obtained on request to its secretary.

Cross-references

The British Standards which implement international or European publications referred to in this document may be found in the BSI Standards Catalogue under the section entitled “International Standards Correspondence Index”, or using the “Find” facility of the BSI Standards Electronic Catalogue.

Additional information

Subclause 8.2, which is concerned with symbols to be used to describe adhesion failure, has been amended to include further types of failure because of the inclusion of rigid substrates.

Also, an informative Annex A, which discusses the analysis of the viscoelastic behaviour of the bond has been added.

In Annex B the date of the reference in the *J. Am. Chem. Soc* should be 1955 and not 1995.

A British Standard does not purport to include all the necessary provisions of a contract. Users of British Standards are responsible for their correct application.

Compliance with a British Standard does not of itself confer immunity from legal obligations.

Summary of pages

This document comprises a front cover, an inside front cover, pages i and ii, the ISO title page, page ii, pages 1 to 4, an inside back cover and a back cover. This standard has been updated (see copyright date) and may have had amendments incorporated. This will be indicated in the amendment table on the inside front cover.

Amendments issued since publication

Amd. No.	Date	Comments

This British Standard, having been prepared under the direction of the Sector Board for Materials and Chemicals, was published under the authority of the Standards Board and comes into effect on 15 July 1997

© BSI 03-1999

ISBN 0 580 27832 8

Contents

	Page
National foreword	Inside front cover
Foreword	ii
1 Scope	1
2 Normative references	1
3 Principle	1
4 Apparatus	1
4.1 Tensile-testing machine	1
4.2 Fixture	1
4.3 Grip	2
4.4 Temperature-controlled chamber	2
5 Test pieces	2
5.1 Dimensions	2
5.2 Preparation	2
5.3 Number	3
5.4 Conditioning before testing	3
6 Test temperature and humidity	3
7 Procedure	3
8 Expression of results	3
8.1 Adhesion strength	3
8.2 Adhesion failure symbols	3
9 Precision	4
10 Test report	4
Annex A (informative) Analysis of the viscoelastic behaviour of the bond	Inside back cover
Annex B (informative) Bibliography	Inside back cover
Figure 1 — Example of test fixture	1
Figure 2 — Standard Test piece	1

