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Rubber, vulcanized or thermoplastic — Determination of adhesion to metal — Two-plate method

Caoutchouc vulcanisé ou thermoplastique — Détermination de l'adhérence au métal — Méthode à deux plaques



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Page

Contents

Forew	ord		iv	
1	Scope		1	
2	Normative references		1	
3	Terms and definitions			
4	Principle			
5	Appar	ratus	1 1 1 1 2 4 4 4 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	
6		eferences 1 efinitions 1 1 1 2 2 4 4 1 4 1 4 1 4 1 5 1 5		
7	Test p 7.1 7.2 7.3 7.4	iece Dimensions Preparation Number Conditioning	4 4 5	
8	Proce	dure	5	
9	Expre 9.1 9.2	Adhesion value Adhesion failure symbols	5	
10	Test r	Test report		
Annex A (normative) Calibration schedule				

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

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For an explanation on the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see the following URL: www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 45, *Rubber and rubber products*, Subcommittee SC 2, *Testing and analysis*.

This sixth edition cancels and replaces the fifth edition (ISO 814:2011), of which it constitutes a minor revision to update the normative references in <u>Clause 2</u> as well as the failure symbols in <u>9.2</u>.

Rubber, vulcanized or thermoplastic — Determination of adhesion to metal — Two-plate method

WARNING 1 — Persons using this document should be familiar with normal laboratory practice. This document does not purport to address all of the safety problems, if any, associated with its use. It is the responsibility of the user to establish appropriate safety and health practices and to ensure compliance with any national regulatory conditions.

WARNING 2 — Certain procedures specified in this document might involve the use or generation of substances, or the generation of waste, that could constitute a local environmental hazard. Reference should be made to appropriate documentation on safe handling and disposal after use.

1 Scope

This document specifies a method for determining the adhesion strength of rubber-to-metal bonds where the rubber part is assembled between two parallel metal plates, using the adhesive system under investigation.

The method is applicable primarily to test pieces, prepared in the laboratory under standard conditions, such as can be used to provide data for the development of rubber compounds and control of methods of manufacture.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 5893, Rubber and plastics test equipment — Tensile, flexural and compression types (constant rate of traverse) — Specification

ISO 18899:2013, Rubber — Guide to the calibration of test equipment

ISO 23529, Rubber — General procedures for preparing and conditioning test pieces for physical test methods

3 Terms and definitions

No terms and definitions are listed in this document.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <u>http://www.iso.org/obp</u>
- IEC Electropedia: available at <u>http://www.electropedia.org/</u>

4 Principle

The test consists in measuring the force required to cause the rupture of a unit of standard dimensions, comprising rubber bonded to two parallel metal plates, the direction of the force being at 90° to the bonded surface.