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Second edition
2014-11-01

Rubber, vulcanized or thermoplastic — Determination of compression set —

Part 2: At low temperatures

*Caoutchouc vulcanisé ou thermoplastique — Détermination de la
déformation rémanente après compression —*

Partie 2: À basses températures



Reference number
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Contents

	Page
Foreword	iv
Introduction	v
1 Scope	1
2 Normative references	1
3 Principle	1
3.1 Method 1.....	1
3.2 Method 2.....	2
4 Apparatus for low temperature tests	2
4.1 Method 1.....	2
4.2 Method 2.....	4
5 Calibration	6
6 Test pieces	6
6.1 Dimensions.....	6
6.2 Preparation.....	7
6.3 Number.....	7
6.4 Time interval between production and testing.....	7
6.5 Conditioning.....	7
7 Test conditions	8
7.1 Duration of test.....	8
7.2 Temperature of test.....	8
8 Procedure	8
8.1 Method 1.....	8
8.2 Method 2.....	9
9 Expression of results	10
10 Precision	10
11 Test report	10
Annex A (normative) Calibration schedule	12
Bibliography	16

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).

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For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT) see the following URL: [Foreword - Supplementary information](#)

The committee responsible for this document is ISO/TC45, *Rubber and rubber products*, SC 2, *Testing and analysis*.

This second edition cancels and replaces the first edition (ISO 815-2:2008), which has been technically revised, mainly by addition of method 1 and a calibration schedule ([Annex A](#)).

ISO 815 consists of the following parts, under the general title *Rubber, vulcanized or thermoplastic — Determination of compression set*:

- *Part 1: At ambient or elevated temperatures*
- *Part 2: At low temperatures*

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Introduction

Allowing measurement and recording of the compression set at low temperature is very sensitive to testing conditions, and the values obtained can differ a lot especially for type B test pieces. That is why two measurement methods have been introduced. Method 2 generally gives a higher compression set than method 1, and this difference should be taken into account when preparing material specifications.

Those methods are intended to measure the ability of rubbers of hardness within the range 10 IRHD to 95 IRHD to retain their elastic properties at specified temperatures after prolonged compression at constant strain (normally 25 %) under one of the alternative sets of conditions described. For rubber of nominal hardness 80 IRHD and above, a lower compression strain is used: 15 % for a nominal hardness from 80 IRHD to 89 IRHD, and 10 % for a nominal hardness from 90 IRHD to 95 IRHD.

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