

This is a preview of "ISO 28641:2018". [Click here to purchase the full version from the ANSI store.](#)

Second edition
2018-06

Rubber compounding ingredients — Organic chemicals — General test methods

*Ingrédients de mélange du caoutchouc — Produits chimiques
organiques — Méthodes d'essai générales*



Reference number
ISO 28641:2018(E)

© ISO 2018

This is a preview of "ISO 28641:2018". [Click here to purchase the full version from the ANSI store.](#)



COPYRIGHT PROTECTED DOCUMENT

© ISO 2018

All rights reserved. Unless otherwise specified, or required in the context of its implementation, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
CP 401 • Ch. de Blandonnet 8
CH-1214 Vernier, Geneva
Phone: +41 22 749 01 11
Fax: +41 22 749 09 47
Email: copyright@iso.org
Website: www.iso.org

Published in Switzerland

This is a preview of "ISO 28641:2018". [Click here to purchase the full version from the ANSI store.](#)

Contents

	Page
Foreword	v
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 Abbreviated terms	2
5 General requirements	2
5.1 Thermometer	2
5.2 Desiccator	2
6 Sampling	2
6.1 Apparatus	2
6.2 Sampling method	2
7 Test methods	2
7.1 Density and relative density	2
7.1.1 General	2
7.1.2 Hydrometer method	3
7.1.3 Pyknometer method	3
7.1.4 Expression of results	6
7.1.5 Test report	6
7.2 Loss on heating	6
7.2.1 General	6
7.2.2 Method A	6
7.2.3 Method B	7
7.2.4 Calculation	8
7.2.5 Expression of results	9
7.2.6 Precision	9
7.2.7 Test report	9
7.3 Sieve residue	9
7.3.1 General	9
7.3.2 Principle	9
7.3.3 Reagents	9
7.3.4 Apparatus	10
7.3.5 Procedure	10
7.3.6 Calculation	11
7.3.7 Expression of results	11
7.3.8 Precision	11
7.3.9 Test report	11
7.4 pH of water extract	11
7.4.1 Principle	11
7.4.2 Apparatus	11
7.4.3 Procedure	12
7.4.4 Test report	12
7.5 Melting point	13
7.5.1 General	13
7.5.2 Method A	13
7.5.3 Method B	13
7.5.4 Method C	14
7.5.5 Expression of results	14
7.5.6 Precision	15
7.5.7 Test report	15
7.6 Temperature of solidification	15
7.6.1 Principle	15
7.6.2 Apparatus	15

This is a preview of "ISO 28641:2018". [Click here to purchase the full version from the ANSI store.](#)

7.6.3	Procedure.....	16
7.6.4	Expression of results.....	17
7.6.5	Test report.....	18
7.7	Softening point.....	18
7.7.1	General.....	18
7.7.2	Principle.....	18
7.7.3	Apparatus.....	18
7.7.4	Procedure.....	19
7.7.5	Expression of results.....	20
7.7.6	Precision.....	20
7.7.7	Test report.....	20
7.8	Density of the bulk material.....	20
7.8.1	Principle.....	20
7.8.2	Method A (constant mass method).....	20
7.8.3	Method B (constant volume method).....	22
7.8.4	Test report.....	23
7.9	Ash.....	23
7.9.1	Principle.....	23
7.9.2	Apparatus.....	23
7.9.3	Procedure.....	23
7.9.4	Calculation.....	24
7.9.5	Expression of results.....	24
7.9.6	Precision.....	24
7.9.7	Test report.....	24
7.10	Refractive index.....	24
7.10.1	Principle.....	24
7.10.2	Apparatus.....	24
7.10.3	Procedure.....	25
7.10.4	Expression of results.....	26
7.10.5	Precision.....	26
7.10.6	Test report.....	26
Annex A (normative) Verification of accuracy of pH-meter.....		28
Annex B (normative) Calibration of the pH-meter.....		32
Annex C (informative) Precision.....		34
Annex D (informative) Conversion formulae between density and relative density.....		40
Bibliography.....		41

This is a preview of "ISO 28641:2018". [Click here to purchase the full version from the ANSI store.](#)

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).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

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 3, *Raw materials (including latex) for use in the rubber industry*.

This second edition cancels and replaces the first edition (ISO 28641:2010), which has been technically revised.

The main changes compared to the previous edition are as follows:

- updating of the normative references and bibliography;
- deletion of [Clause 6](#) giving the procedure for drying samples, and deletion of all references to [Clause 6](#) in the document;
- modification of the procedure regarding sieve residue in [7.3.5 c](#)), [7.3.5 d](#)), [7.3.5 h](#));
- in the test method for determination of the melting point ([7.5](#)), deletion of method B for water-insoluble and waxy samples; addition of a list of apparatus for the method for vaselines;
- in the test method for determination of the density, addition of a method B (constant volume method);
- deletion of [Annex A](#) giving examples of sampling apparatus and [Annex B](#) giving examples of suitable drying apparatus;
- addition of a new [Annex D](#) giving the conversion formulae between density and relative density.