

SLOVENSKI STANDARD SIST EN 16916:2025

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Snovi iz izrabljenih avtomobilskih gum - Določanje specifičnih zahtev za vzorčenje in ugotavljanje deleža vlage z uporabo sušilnika

Materials obtained from End of Life Tyres - Determination of specific requirements for sampling and determination of moisture content using the oven-dry method

Materialien aus Altreifen - Bestimmung der spezifischen Anforderungen für die Probenahme und Bestimmung des Feuchtegehaltes aus dem Ofen-Trockenverfahren

Matériaux obtenus à partir de pneus usagés non réutilisables (PUNR) - Détermination des exigences spécifiques relatives à l'échantillonnage et détermination de la teneur en humidité selon la méthode de séchage à l'étuve

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ICS:

13.030.50 Recikliranje Recycling

83.160.01 Avtomobilske pnevmatike na Tyres in general

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English Version

Materials obtained from End-of-Life Tyres - Determination of specific requirements for sampling and determination of moisture content using the oven-dry method

Matériaux obtenus à partir de pneus usagés non réutilisables (PUNR) - Détermination des exigences spécifiques relatives à l'échantillonnage et détermination de la teneur en humidité selon la méthode de séchage à l'étuve

Materialien aus Altreifen - Bestimmung der spezifischen Anforderungen für die Probenahme und Bestimmung des Feuchtegehaltes aus dem Ofen-Trockenverfahren

This European Standard was approved by CEN on 6 October 2024.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

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EUROPEAN COMMITTEE FOR STANDARDIZATION COMITÉ EUROPÉEN DE NORMALISATION EUROPÄISCHES KOMITEE FÜR NORMUNG

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EN 16916:2024 (E)

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European foreword

This document (EN 16916:2024) has been prepared by Technical Committee CEN/TC 366 "Materials obtained from End-of-Life Tyres (ELT)", the secretariat of which is held by UNI.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by May 2025 and conflicting national standards shall be withdrawn at the latest by May 2025.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

This document supersedes CEN/TS 16916:2016.

In comparison with CEN/TS 16916:2016, the following changes have been made:

- In 6.5.2, two apparatus for taking samples are shown (taking of an increment from the centre axis of the big bag and taking of an increment by the side of the big bag);
- "Figure 3 Screw" has been replaced by "Figure 3 Sample collector (all-layer sampler type)";
- "Figure 4 Sampler" has been replaced by "Figure 4 Sample collector (sampling lance)";
- EN 14243-2, Materials obtained from end of life tyres Part 2: Granulates and powders Methods for determining the particle size distribution and impurities, including free steel and free textile content has been included as a reference.

Any feedback and questions on this document should be directed to the users' national standards body. A complete listing of these bodies can be found on the CEN website.

According to the CEN-CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Türkiye and the United Kingdom.

EN 16916:2024 (E)

1 Scope

This document specifies a method for determining the total moisture content of materials obtained from End-of-Life Tyres (ELT) by drying samples in an oven. The method is applicable to chips, granulates, powders and textile derived from the treatment of End-of-Life Tyres.

This document is not intended for the determination of moisture content in steel wires.

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.

EN 14243-1, Materials obtained from end of life tyres — Part 1: General definitions related to the methods for determining their dimension(s) and impurities

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 14243-1 apply.

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

- ISO Online browsing platform: available at https://www.iso.org/obp/
- IEC Electropedia: available at https://www.electropedia.org/

4 Principle

The sample of material is dried at a temperature of 105 °C in natural air circulation until constant mass is reached. The percentage of moisture is calculated from the loss in mass of the sample. The method includes a procedure for the correction of buoyancy effects.

5 ps**Apparatus**teh.ai/catalog/standards/sist/a37d7a98-062a-4089-b98a-b0d2d36ffa29/sist-en-16916-2025

5.1 Drying oven, capable of being controlled at (105 ± 2) °C (see declaration of the manufacturer) and with air ventilation between three and five times per hour.

The air velocity shall be such that the sample particles are not dislodged from their dish or tray (5.2).

5.2 Dishes or trays of non-corrodible and heat-resistant material and of such dimensions that they are able to hold the total sample in the proportion of about 1 g of sample per 100 mm^2 of surface area of the dish or tray respectively or about $0.5 \text{ g per } 100 \text{ mm}^2$ for textile samples.

The surface of the dish or tray shall be such that the possibility to adsorption/absorption is minimized (very clean and even surface).

5.3 Balance, capable of weighing the sample and dish or tray (5.2), as received, to the nearest 0,1 g.