



**SLOVENSKI STANDARD**  
**oSIST prEN 17189:2024**

**01-februar-2024**

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**Snovi iz izrabljenih avtomobilskih gum (ELT) - Določanje prave gostote granulotov in praškov - Metoda, ki temelji na vodni piknometriji**

Materials obtained from end of life tyres (ELT) - Determination of the true density of granulates and powders - Method based on water pycnometry

Materialien aus Altreifen (ELTs) - Bestimmung der tatsächlichen Dichte von Granulaten - Methode auf der Grundlage von Wasser-Pyknometrie

Matériaux obtenus à partir de pneus usagés non réutilisables (PUNR) - Détermination de la densité vraie des granulats et des poudrettes - Méthode basée sur la pycnométrie à eau

**Ta slovenski standard je istoveten z: prEN 17189**

<https://standards.iteh.ai/catalog/standards/sist/68df5828-a7dd-461b-bc10-41b817380505/osist-pren-17189-2024>

**ICS:**

13.030.50	Recikliranje	Recycling
83.160.01	Avtomobilske pnevmatike na splošno	Tyres in general

**oSIST prEN 17189:2024**

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EUROPEAN STANDARD  
NORME EUROPÉENNE  
EUROPÄISCHE NORM

**DRAFT**  
**prEN 17189**

November 2023

ICS

Will supersede CEN/TS 17189:2018

English Version

## Materials obtained from end of life tyres (ELT) - Determination of the true density of granulates and powders - Method based on water pycnometry

Materialien aus Altreifen (ELTs) - Bestimmung der  
tatsächlichen Dichte von Granulaten - Methode auf der  
Grundlage von Wasser-Pycnometrie

This draft European Standard is submitted to CEN members for enquiry. It has been drawn up by the Technical Committee CEN/TC 366.

If this draft becomes a European Standard, 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.

This draft European Standard was established by CEN 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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Recipients of this draft are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

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

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## European foreword

This document (prEN 17189:2023) 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 document is currently submitted to the CEN Enquiry.

This document will supersede CEN/TS 17189:2018.

prEN 17189:2023 includes the following significant technical changes with respect to CEN/TS 17189:2018:

- addition of a sampling method for powders in the Title and Scope;
- revision of the used terminology to integrate powders;
- review of the general structure of the document.

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**prEN 17189:2023(E)****Introduction**

True density is a key measurement for product characterization of size-reduced materials such as granulates and powders. This document defines a specific method for granulates and powders considering that, to obtain an accurate value of true density, a representative sample of the material to be tested has to be taken according to the principle that every particle of the sample that represents the lot will have an equal probability of being included in the sample.

Sampling criteria to assess characteristics of granulates and powders at various stages of a production process by size reduction of end-of-life tyres are given in EN 14243-2:2019, Clause 5.

Measurement of true density could be useful to identify the nature of particles of different origin, for example, when a customer needs to check if he received granular material derived from End-of-Life Tyres (ELTs) or from products based on EPDM polymers. True density is different between these two products and could be reliable element to discriminate.

Typical values are:

- ELT granulates: 1,12 - 1,22;
- EPDM granulates: 1,4 - 1,6.

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