

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

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

See Eesti standard EVS-EN 14243-1:2019 sisaldab Euroopa standardi EN 14243-1:2019 ingliskeelset teksti.	This Estonian standard EVS-EN 14243-1:2019 consists of the English text of the European standard EN 14243-1:2019.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 13.02.2019.	Date of Availability of the European standard is 13.02.2019.
Standard on kättesaadav Eesti Standardikeskusest.	The standard is available from the Estonian Centre for Standardisation.

Tagasisidet standardi sisu kohta on võimalik edastada, kasutades EVS-i veebilehel asuvat tagasiside vormi või saates e-kirja meiliaadressile [standardiosakond@evs.ee](mailto:standardiosakond@evs.ee).

ICS 83.160.01

Standardite reprodutseerimise ja levitamise õigus kuulub Eesti Standardikeskusele

Andmete paljundamine, taastekitamine, kopeerimine, salvestamine elektroonsesse süsteemi või edastamine ükskõik millises vormis või millisel teel ilma Eesti Standardikeskuse kirjaliku loata on keelatud.

Kui Teil on küsimusi standardite autorikaitse kohta, võtke palun ühendust Eesti Standardikeskusega:  
Koduleht [www.evs.ee](http://www.evs.ee); telefon 605 5050; e-post [info@evs.ee](mailto:info@evs.ee)

The right to reproduce and distribute standards belongs to the Estonian Centre for Standardisation

No part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying, without a written permission from the Estonian Centre for Standardisation.

If you have any questions about copyright, please contact Estonian Centre for Standardisation:

Homepage [www.evs.ee](http://www.evs.ee); phone +372 605 5050; e-mail [info@evs.ee](mailto:info@evs.ee)

English Version

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

Matériaux produits à partir de pneus usagés non réutilisables (PUNR) - Partie 1: Définitions générales relatives aux méthodes de détermination de leur(s) dimension(s) et impuretés

This European Standard was approved by CEN on 19 November 2018.

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.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.



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

**CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels**

<b>Contents</b>		<b>Page</b>
<b>European foreword</b> .....		<b>3</b>
<b>Introduction</b> .....		<b>4</b>
<b>1</b>	<b>Scope</b> .....	<b>5</b>
<b>2</b>	<b>Normative references</b> .....	<b>5</b>
<b>3</b>	<b>Terms and definitions</b> .....	<b>5</b>
<b>4</b>	<b>Categories of products obtained from end-of-life tyres based mainly on their dimensions</b> .....	<b>9</b>
<b>Bibliography</b> .....		<b>11</b>

## European foreword

This document (EN 14243-1:2019) 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 August 2019, and conflicting national standards shall be withdrawn at the latest by August 2019.

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 together with EN 14243-2 and EN 14243-3 supersede CEN/TS 14243:2010.

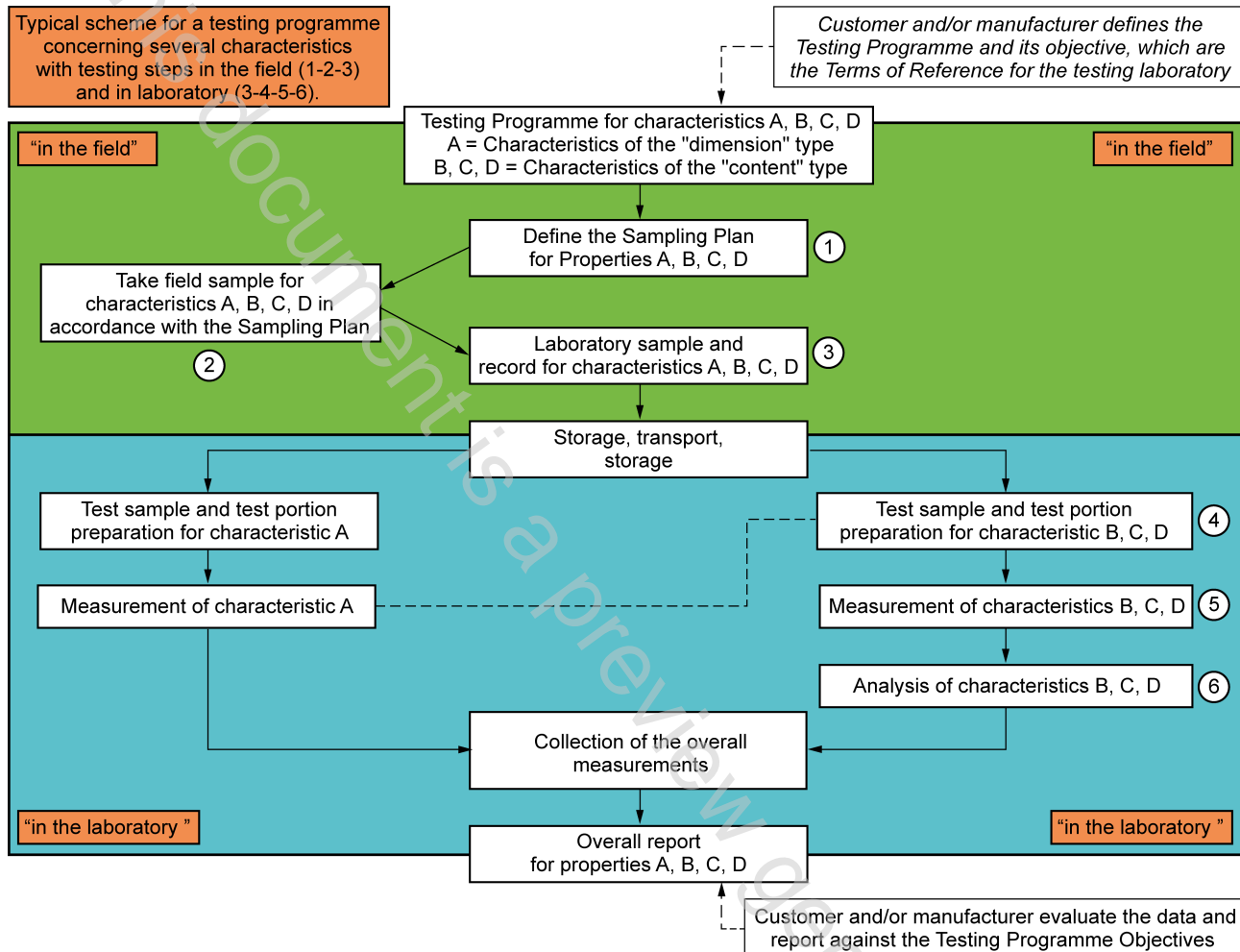
EN 14243, Materials obtained from End-of-Life Tyres (ELT), consists of the following parts:

- Part 1: General definitions related to the methods for determining their dimension(s) and impurities
- Part 2: Granulates and powders – Methods for determining the particule size distribution and impurities, including free steel and free textile content
- Part 3: Shreds cuts and chips – Methods for determining their dimension(s) including protruding filaments dimensions

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

## Introduction

This standard is used in conjunction with the other parts of EN 14243 series. Such series is intended to cover the testing programs needed to characterize each product category as shown on the figure below.



**Figure 1 — Typical scheme for a testing programme concerning several characteristics with testing steps in the field and in the laboratory**

End-of-life tyres consist mainly of passenger and commercial vehicle tyres, truck, earthmover and agricultural tyres manufactured for distribution in the European market that are no longer suitable for their original purpose. Products from end-of-life tyres are used as a secondary raw material finding a wide range of applications. The principal categories of materials from end-of-life tyres are defined on the basis of their dimension(s) according to this standard.

## 1 Scope

This document provides general definitions for sample collection and preparation of a representative sample based on a sampling plan for the purpose of determining dimensions and impurities.

## 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 14243-2:2019, *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*

EN 14243-3:2019, *Materials obtained from End-of-life tyres — Part 3: Shreds, cuts and chips — Methods for determining their dimension(s) including protruding filaments dimensions*

## 3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

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

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

### 3.1 Sampling and sample preparation

#### 3.1.1

##### **sample**

portion of material selected from a larger quantity of material

[SOURCE: IUPAC definition]

#### 3.1.2

##### **sub-sample**

portion of a sample

#### 3.1.3

##### **increment**

sub-portion of material extracted in a single operation by the sampling device

[SOURCE: ISO 13909-1:2016, 3.15, modified]

#### 3.1.4

##### **characteristic**

property which helps to identify or differentiate items of a given population

Note 1 to entry: The characteristic may be either quantitative (by variables) or qualitative (by attributes).

#### 3.1.5

##### **lot**

defined quantity of material for which a characteristic is to be determined