

Materials obtained from end of life tyres - Part 3:
Shreds, cuts and chips - Methods for determining their
dimension(s) including protruding filaments
dimensions

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN 14243-3:2019 sisaldab Euroopa standardi EN 14243-3:2019 ingliskeelset teksti.	This Estonian standard EVS-EN 14243-3:2019 consists of the English text of the European standard EN 14243-3:2019.
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English Version

Materials obtained from end of life tyres - Part 3: Shreds, cuts and chips - Methods for determining their dimension(s) including protruding filaments dimensions

Matériaux produits à partir de pneus usagés non réutilisables (PUNR) - Partie 3: Broyats, coupes et chips - Méthodes de détermination de leur(s) dimension(s) y compris les dimensions des barbules

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

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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 foreword

This document (EN 14243-3:2019) 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of an identical text or by endorsement, at the latest by August 2019, and conflicting national standards shall be withdrawn at the latest by August 2019.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 14243-1 and EN 14243-2 supersedes CEN/TS 14243:2010.

EN 14243, Materials obtained from End-of-Life Tyres (ELTs), 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 particle 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.

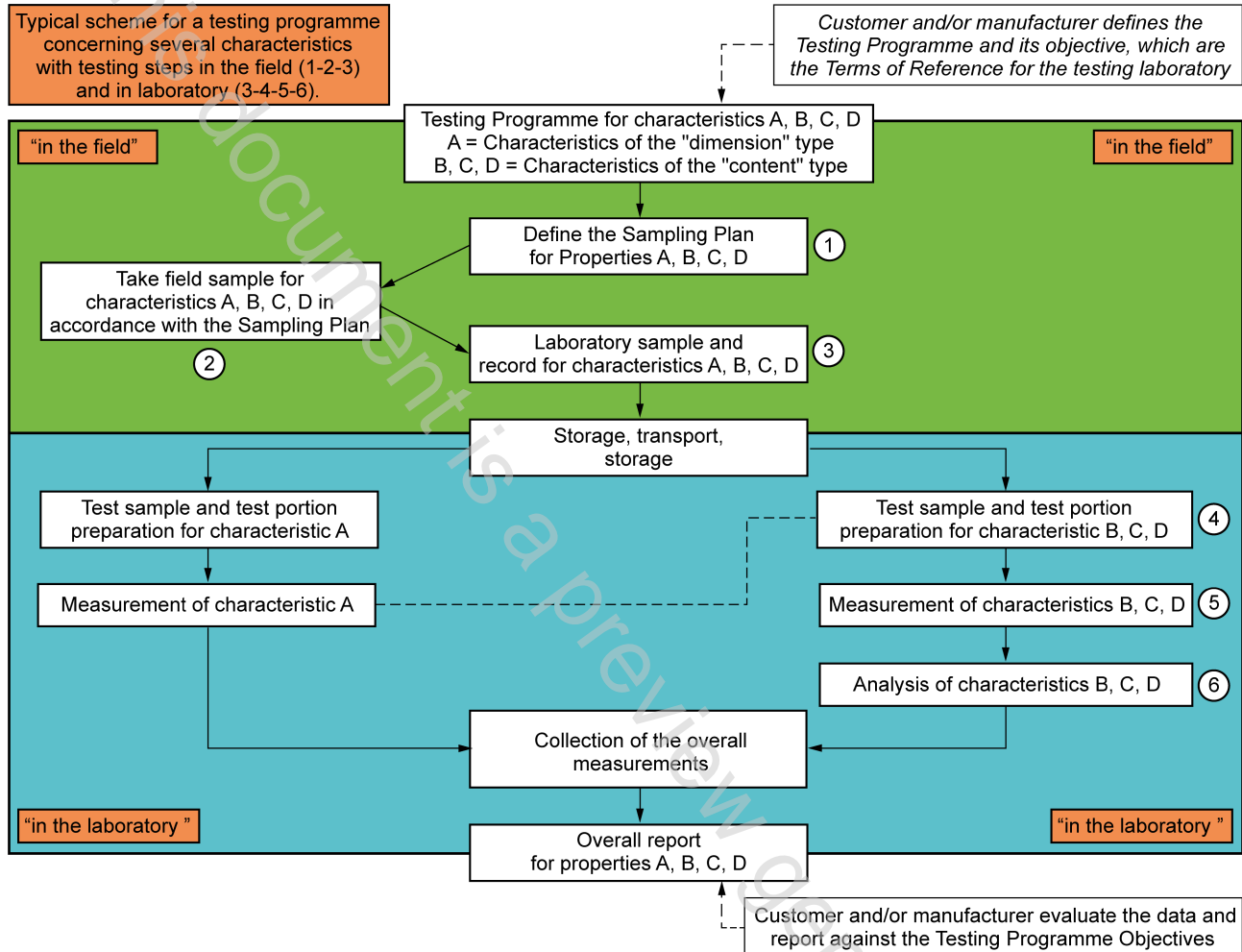


Figure 1 — Typical scheme for a testing programme concerning several characteristics with testing steps in the field and in the laboratory

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 EN 14243-1.

1 Scope

This document provides test methods for the determination of the dimension(s) of shreds, cuts and chips (including protruding filaments) produced from all categories of end-of-life tyres at all steps of the treatment processes.

The methods described in this document include sample collection and the preparation of a representative sample based on a sampling plan for the purpose of determining dimensions.

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 14243-1:2019, *Materials obtained from end of life tyres — Part 1: General definitions related to the methods for determining their dimension(s) and impurities*

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*

ISO 565, *Test sieves — Metal wire cloth, perforated metal plate and electroformed sheet — Nominal sizes of openings*

ISO 3310-1, *Test sieves — Technical requirements and testing — Part 1: Test sieves of metal wire cloth*

ISO 5725-5, *Accuracy (trueness and precision) of measurement methods and results — Part 5: Alternative methods for the determination of the precision of a standard measurement method*

3 Terms, definitions, symbols and abbreviated terms

3.1 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 14243-1:2019 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>

3.2 Symbols and abbreviated terms

For the purposes of this document, the following symbols apply.

<i>ANPF</i>	Average Number per Piece of Filaments longer than <i>MLF1</i>
<i>HDF</i>	Higher Dimension of the Format (millimetres)
<i>L</i>	Maximum projected Length (millimetres)
<i>LDF</i>	Lower Dimension of the Format (millimetres)
<i>MF</i>	Mass of the Fine pieces (grams)
<i>MLF</i>	Minimum length of a filament (in millimetres)