BS EN 17308:2024

BSI Standards Publication

# Materials produced from end of life tyres — Steel wire — Determination of the non-metallic content

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The UK participation in its preparation was entrusted to Technical Committee PRI/73, Industrial rubber products.

A list of organizations represented on this committee can be obtained on request to its committee manager.

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# EN 17308

November 2024

ICS 13.030.50; 83.160.01

Supersedes CEN/TS 17308:2019

English Version

# Materials produced from end of life tyres - Steel wire - Determination of the non-metallic content

Matériaux obtenus à partir de pneus usagés non réutilisables (PUNR) - Fils métalliques - Détermination de la teneur en matériaux non métalliques

Aus Altreifen gewonnene Materialien - Stahldrähte - Bestimmung der nicht-metallischen Bestandteile

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

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## European foreword

This document (EN 17308:2024) 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of an identical text or by endorsement, at the latest by May 2025 and conflicting national standards shall be withdrawn at the latest by May 2025.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.

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# 1 Scope

This document specifies two different methods for the quantitative estimation of non-metallic content remaining adhered to the steel wire obtained from the recovery of materials from end-of-life tyres.

The pyrolysis method is considered as the reference method while the hydrostatic method is considered as an *in situ* method.

This document includes sample collection and the preparation of representative samples based on a sampling plan for the purpose of their characterization.

This document does not apply to the operational performance or fitness for use of the materials which are deemed to be a function of agreements between the manufacturer and the customer.

This document does not apply to address all the safety concerns, if any, associated with its use. This document does not establish appropriate safety and health practices and does not determine the applicability of regulatory limitations prior to its use.

# 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 (all parts), *Materials obtained from end of life tyres*

# 3 Terms and definitions

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

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

— IEC Electropedia: available at https://www.electropedia.org/

— ISO Online browsing platform: available at https://www.iso.org/obp/

**3.1**
**sample**
amount of material taken from a population and intended to provide information on the population

**3.2**
**increment**
portion of material extracted in a single operation of the sampling device

[SOURCE: EN 14243-1:2019, 3.1.3, modified – “sub-portion” is replaced by “portion”.]

**3.3**
**characteristic**
property which helps to identify or differentiate items of a given population

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

[SOURCE: EN 14243-1:2019, 3.1.4]



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**3.4**
**lot**
defined quantity of material for which a characteristic is to be determined

Note 1 to entry: In sampling standards, the lot is also designated as the stated size or volume that is considered appropriate for assessing the material. It follows that variations occurring in the material on any finer scale than this are deemed not to be of relevance.

**3.5**
**combined sample**
sample consisting of all the increments taken from a lot

Note 1 to entry: A combined sample is a quantity of material, representative of the lot for which the quality is to be determined.

**3.6**
**field sample**
sample taken in the field and from which laboratory samples are produced

**3.7**
**laboratory sample**
sample or sub-sample sent to or received by the laboratory

Note 1 to entry: When the laboratory sample has been prepared (reduced) by subdivision, mixing or crushing, or by a combination of these processes, it becomes the test sample. A laboratory sample that requires no preparation can be used directly as the test sample. A test portion is removed from the test sample for testing or analysis purposes. The laboratory sample is the final sample from the point of view of sample collection, but it is the initial sample from the point of view of the laboratory.

Note 2 to entry: Several laboratory samples can be prepared and sent to different laboratories, or they can be sent to the same laboratory for different purposes. In the latter case, they are generally considered to be a single laboratory sample and documented as such.

[SOURCE: EN 14243-1:2019, 3.1.8, modified – Note 1 to entry contains additional information.]

**3.8**
**test sample**
sample prepared from the laboratory sample, from which the test portions are removed for testing or for analysis

Note 1 to entry: The procedures of preparation from the laboratory sample are not included.

[SOURCE: EN 14243-1:2019, 3.1.9, modified – Note 1 to entry has been added.]

**3.9**
**population**
totality of items, or total volume of material, to be investigated by sampling

Note 1 to entry: The population will generally be a convenient, well-defined subset of the overall population (e.g. a year's production of material) that is believed to be typical of that wider population.



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