

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**

Materialien aus Altreifen - Bestimmung der  
spezifischen Anforderungen für die Probennahme und  
Bestimmung des Feuchtigkeitsgehaltes aus dem Ofen-  
Trockenverfahren

This Technical Specification (CEN/TS) was approved by CEN on 11 January 2016 for provisional application.

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## European foreword

This document (CEN/TS 16916:2016) 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.

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## 1 Scope

This Technical Specification 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, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

CEN/TS 14243:2010, *Materials produced from end of life tyres — Specification of categories based on their dimension(s) and impurities and methods for determining their dimension(s) and impurities*

## 3 Terms and definitions

For the purposes of this document, the terms and definitions given in CEN/TS 14243:2010 apply.

## 4 Principle

The sample of material is dried at a temperature of 105 °C in air atmosphere 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 Apparatus

**5.1 Drying oven**, capable of being controlled at  $(105 \pm 2)$  °C (see declaration of the manufacturer) and in which the air atmosphere changes 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<sup>2</sup> of surface area of the dish or tray respectively or about 0,5 g per 100 mm<sup>2</sup> 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.