

<b>TNI</b>	<b>Ochrana ovzdušia Vonkajšie ovzdušie Aplikácia EN 16909 na stanovenie elementárneho uhlíka (EC) a organického uhlíka (OC) v PM10 a celkových PM</b>	<b>TNI CEN/TR 17554</b>  83 5629
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Ambient air - Application of EN 16909 for the determination of elemental carbon (EC) and organic carbon (OC) in PM10 and PMcoarse

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## Ambient air - Application of EN 16909 for the determination of elemental carbon (EC) and organic carbon (OC) in PM10 and PMcoarse

Air ambiant - Application de la norme EN 16909 pour  
le dosage du carbone élémentaire (EC) et du carbone  
organique (OC) dans les fractions PM10 et PMgrossière

Außenluft - Anwendung der EN 16909 zur  
Bestimmung von elementarem Kohlenstoff (EC) und  
organischem Kohlenstoff (OC) in PM10 und PMcoarse

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**CEN/TR 17554:2020 (E)**

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## **European foreword**

This document (CEN/TR 17554:2020) has been prepared by Technical Committee CEN/TC 264 “Air quality”, the secretariat of which is held by DIN.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

**CEN/TR 17554:2020 (E)****Introduction**

The standard method EN 16909 provides guidance for the determination of organic carbon (OC) and elemental carbon (EC) in airborne particulate matter deposited on filters. It has been developed following the requirement for the EU member states to measure OC and EC in the PM<sub>2,5</sub> size fraction (less than 2,5 µm in aerodynamic diameter) at background sites [5]. EN 16909 standard states: “The same analysis method may also be used for smaller size fractions than PM<sub>2,5</sub>. Any possible additional artefacts for larger particles, e.g. pyrolysis or higher concentrations of carbonates, should be assessed.”

## **1 Scope**

This document describes procedures to assess the applicability of the standard method EN 16909 (determination of OC and EC deposited on filters) to particle size fractions up to 10 µm in aerodynamic diameter (50 % cut off).

## **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 16909, *Ambient air - Measurement of elemental carbon (EC) and organic carbon (OC) collected on filters*

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