BS ISO 12103-1:2016

BSI Standards Publication

Road vehicles — Test contaminants for filter evaluation

Part 1: Arizona test dust

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National foreword

This British Standard is the UK implementation of ISO 12103-1:2016. It supersedes BS ISO 12103-1:1997 which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee MCE/21/2, Air filters for air supply to I.C. engines and compressors - Not on aircraft.

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

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

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Road vehicles — Test contaminants for filter evaluation —

Part 1: Arizona test dust

Véhicules routiers — Poussière pour l'essai des filtres —

Partie 1: Poussière d'essai d'Arizona

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Contents

Page

Foreword ..... **iv**
Introduction ..... **v**
1 Scope **1**
2 Test dust description **1**
3 Test dust designation **1**
4 Particle size distribution **1**
5 Chemical composition **2**
5.1 Typical chemical content of ISO specified Arizona test dusts 2
5.2 Chemical analysis methodology — X-ray fluorescence analysis (XRF) 2
Annex A (normative) **Analysis equipment and operating procedure** **3**
Annex B (informative) **History of Arizona test dust** **7**
Annex C (informative) **Handling and preparation** **9**
Bibliography **14**

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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT) see the following URL: Foreword - Supplementary information

The committee responsible for this document is ISO/TC 22, *Road vehicles*, Subcommittee SC 34, *Propulsion, powertrain and powertrain fluids*.

This second edition cancels and replaces the first edition (ISO 12103-1:1997), which has been technically revised.

ISO 12103 consists of the following parts, under the general title *Road vehicles — Test contaminants for filter evaluation*:

— *Part 1: Arizona test dust*

— *Part 2: Aluminium oxide test dust*

The following parts are under preparation:

— *Part 3: Soot aerosol*

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Introduction

This part of 12103 specifies four grades of test dusts made from Arizona desert sand composed of naturally occurring compounds which motor vehicles are commonly subjected to. These test dusts are used to determine performance of filtration systems. Due to the abrasive characteristics of these materials, they have also been used in wear studies involving bearings, internal combustion engines and fuel injection systems, seals, fan blades, windshield wipers, etc.

This part of ISO 12103 specifies particle size distribution of four grades of test dust by volume percent as opposed to number characterization.

Dusts complying with volume distribution specified in this part of ISO 12103 are not appropriate for calibration of particle counters. For this purpose, refer to ISO 11171.

This is an Arizona Test Dust standard, not other region document. Other dusts and documents can be brought forward to the committee to be developed into a standard.

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