INTERNATIONAL STANDARD

ISO 12103-1

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Road vehicles — Test dust for filter evaluation —

Part 1:
Arizona test dust

Véhicules routiers — Poussière pour l'essai des filtres —

Partie 1: Poussière d'essai d'Arizona

Reference number
ISO 12103-1:1997(E)

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.

Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

International Standard ISO 12103-1 was prepared by Technical Committee ISO/TC 22, *Road vehicles*, Subcommittee SC 7, *Injection equipment and filters for use on road vehicles*.

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

— *Part 1: Arizona test dust*

— *Part 2: Aluminium oxide test dust*

Annexes A and B of this part of ISO 12103 are for information only.

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Introduction

This part of ISO 12103 specifies four grades of test dusts made from desert sand, which is composed of natural occurring compounds that 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, seals, fan blades, windshield wipers, etc.

This part of ISO 12103 specifies the particle size distribution of these four dusts by volume, as opposed to by number. The particle size distribution by number will be added to a revision of this part of ISO 12103.

Dusts complying with the volume distribution specified in this part of ISO 12103 are not appropriate for calibration of particle counters. For this purpose refer to ISO 4402, which is currently under review.