



ISO 12103-1

**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*

**Third edition
2024-01**

This is a preview of ISO 12103-1:2024. [Click here to purchase the full version from the ANSI store.](#)



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This document was prepared by Technical Committee ISO/TC 22, *Road vehicles*, Subcommittee SC 34, *Propulsion, powertrain and powertrain fluids*.

This third edition cancels and replaces the second edition (ISO 12103-1:2016), which has been technically revised.

The main changes are as follows:

- A0 (0 to 5) μm test dust was added.

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This document specifies five 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 document specifies particle size distribution of five grades of test dust by volume percent as opposed to number characterization.

Dusts complying with volume distribution specified in this document 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.