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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 28957.2-2012

**Road vehicles -- Test dust for filter evaluation -- Part 2:
Aluminium oxide test dust**

道路车辆 用于滤清器评定的试验粉尘 第2部分：氧化铝试验粉尘

(English Translation)

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Foreword

GB/T 28957 "Road vehicles - Test dust for cleaner assessed" consists of the following two parts.

--- Part 1. Test silica dust;

--- Part 2. Test alumina dust.

This is Part 2 GB/T 28957-2012 of.

This section drafted in accordance with GB/T 1.1-2009 given rules.

This section uses the translation method identical with ISO 12103-2. Part 2 Test dust for cleaner road vehicles Evaluation 1997 " Score. aluminum oxide test dust "(in English).

This part is proposed by the National Development and Reform Commission.

This part of the National Automotive Standardization Technical Committee (SAC/TC114) centralized.

Introduction

This section provides the test range of inorganic dust with smelting alumina, mainly used in the usual method for evaluation of the weight of the internal combustion engine Fuel filter and oil filter performance.

This section also applies to the use of other criteria of the test dust in different filter performance test program.

Road vehicles - Test dust for filter evaluation of Part 2. Test aluminum dust

1 Scope

This section GB/T 28957 regulations five inorganic dust for filter evaluation test particle size distribution.

These dust gravimetric method is generally used to assess the internal combustion engine test fuel filter and oil filter various test methods.

Test dust can be used for other purposes, e.g., a known hard abrasive wear test required particle size distribution under different conditions.

2 Test dust representation

Grade 2.1

M series offers five standard test dust levels, as follows.

ISO 12103-M1 nominal particle size. 5 μ m;

ISO 12103-M2 nominal particle size. 7 μ m;

ISO 12103-M3 nominal particle size. 14 μ m;

ISO 12103-M4 nominal particle size. 30 μ m;

ISO 12103-M5 nominal particle size. 55 μ m.

2.2 Overview

Five levels of dust by a density of 3960kg/m³ Melting alumina (Al₂O₃) material. The bulk density of the material as the level it varies, ranging between 500kg/m³ ~ 2300kg/m³. Color of the material is different from white to brown, depending on the particle Range of sizes and grades.

3.1 Description

Five levels of dust, each of the particle size distribution, according to Andriessen deposition method (Appendix C) when measured shall comply with Figs. 1 to 5 and Tables 1 to 5.

It should be noted, particle size analysis carried out by other methods, such as a liquid suspension of insoluble dust light scattering (laser diffraction Shot principle) or electrostatic induction zone method (Coulter principle), and will be Andriessen deposition method different results.

When laboratories using different analytical methods, laboratory should export the appropriate clearance between Andriessen test methods and analytical methods used Even data.

Appendix A gives an example, in a representative sample of the dust, M2 dust level (level

five most commonly used dust), with a laser

Ray diffraction method particle size distribution of dust and M2 level maximum and minimum size limits of difference.

3.2 M1 grade particle size distribution boundaries

Table 1 and Figure 1.