Product Specification

PTI Arizona Test Dust A2 fine

DMT GmbH & Co. KG
Plant & Product Safety
Refrigeration & Air
Quality

Am TÜV 1
45307 Essen,
Germany
1. General description:

The Arizona test dust A2 fine is used in various standard tests in the field of filtration and environmental simulation.

The so-called Arizona test dust A2 fine consists of 69% - 77% quartz.

Below you will find an overview of standards in which the Arizona test dust A2 fine is used:

- DIN EN 60312: Dry vacuum cleaners for domestic use
- IEC 60312 (2010): Dry vacuum cleaners for domestic use
- IEC 62885: Devices for surface cleaning
- ISO / TS 11155-1: Road vehicles - Air filters for passenger compartments - Part 1: Test for particle filtration
- ISO / TS 19713-1: Road vehicles - Inlet air cleaning equipment for internal combustion engines and compressors - Part 1: Fractional efficiency testing with fine particles (0.3 µm to 5 µm optical diameter)
- ISO 16889: Fluid power - Filters - Multiple pass test method for determining the filter performance of a filter element
- ISO 16890-3: Air filters for general ventilation and air conditioning - Part 3: Determination of gravimetric efficiency and flow resistance in comparison to the absorbed mass of test dust
- ISO 2941: Fluid power - Hydraulic filter elements - Fracture and burst resistance test
- ISO 4548: Test methods for main flow lubricating oil filters for internal combustion engines
- ISO 5011: Intake air purification equipment for internal combustion engines and compressors - Power measurement

DMT GmbH & Co KG carries out various filter technology tests and environmental simulations. For more information, visit https://plant-product-safety.dmt-group.com/en/product-testing/air-quality/
2. Composition: The specified particle size distribution is shown in the following table:

<table>
<thead>
<tr>
<th>x (µm)</th>
<th>Q3(x) (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.97</td>
<td>4.5 - 5.5</td>
</tr>
<tr>
<td>1.38</td>
<td>8.0 - 9.5</td>
</tr>
<tr>
<td>2.75</td>
<td>21.3 - 23.3</td>
</tr>
<tr>
<td>5.50</td>
<td>39.5 - 42.5</td>
</tr>
<tr>
<td>11.0</td>
<td>57.0 - 59.5</td>
</tr>
<tr>
<td>22.0</td>
<td>73.5 - 76.0</td>
</tr>
<tr>
<td>44.0</td>
<td>89.5 - 91.5</td>
</tr>
<tr>
<td>88.0</td>
<td>97.9 - 98.9</td>
</tr>
<tr>
<td>124.50</td>
<td>99.0 - 100.0</td>
</tr>
<tr>
<td>176.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

3. Transport and Storage: Partial segregation may occur during transport and storage. It is therefore recommended to homogenize the PTI Arizona Test Dust A2 fine before use, which can be achieved by mixing with a laboratory tumbler mixer. Please store in a dry and airtight original container.

4. Quality Assurance: In order to achieve reproducible quality, the raw materials and production are strictly controlled. The following quality controls are carried out:

- Monitoring the particle size distribution of raw materials
- Monitoring the particle size distribution of the end product
5. Specification:

Name: PTI Arizona Test Dust A2 fine
Synonyme: AC fine, fine test dust
Standard: ISO 12103-1
Title of Standard: Road vehicles -- Test contaminants for filter evaluation -- Part 1: Arizona test dust
Composition: Quarz
Material: Quartz
largest particle size (µm): 120
Bulk density (g/cm³): 0,90
Substance density (g/cm³): 2,65
Appearance: solid
Hardness (Mohs): 7,0
Colour: brown / beige