Arizona test dust according to ISO 12103-1

Arizona test dust according to the international standard ISO 12103-1 is characterized by a very well-defined particle size distribution. We ensure this distribution for two different types of Arizona test dust:

1) Arizona test dust **ARIZ-TD**

2) Arizona test dust KSL quartz-free **ARIZ-KSL**

The particle size distribution of these two types of dust is identical, however, there are differences in the chemical composition:

ARIZ-TD: 68-76 % SiO_2 with other oxides (i.a. Al_2O_3, Fe_2O_3, … according standard)

Benefit: Accordance to standard both regarding particle size distribution and in terms of chemical composition.

Drawback: Contains more than 10 % respirable crystalline quartz/silica, which, according to IARC (International Agency for Research on Cancer), has a carcinogenic effect on humans. This results in strict occupational safety limits, which can vary depending on the country, but are usually at 0.1 mg/m^3 or below.

➔ Preferred for product certifications that require strict adherence to the standard and do not allow substitution.

ARIZ-KSL quartz-free: > 97 % aluminum oxide with other oxides

Benefit: quartz-free, no health hazards

Drawback: Does not meet the standard regarding chemical composition.

➔ Preferred when the particle size distribution is of primary importance (e.g. IP code according to ISO 20653) and/or exposure to hazardous dust cannot be ruled out.

Both types are available in four defined grades of fineness:

A1: ultrafine / A2: fine / A3: medium / A4: coarse

For any questions on this topic, we are happy to advise you and your specific use case individually. Please feel free to contact us.