

TDS

Technical Data Sheet

AFSIL[®] DT 220

Precipitated Silicon Dioxide (Toothpaste Grade)

Product Features

- High water absorption, low abrasion power and low cleaning power; Excellent thickening power makes it ideal for improving the formability.
- Suitable for production of transparent, translucent, and opaque toothpaste.
- Can be used in combination with other grades of AFSIL dental silica.
- Outstanding whiteness and evenly distributed particle size. It has great compatibility with sodium fluoride and other active ingredients.

Specification

<i>Properties and test methods</i>	<i>Unit</i>	<i>Specification</i>
Appearance		Free-flowing white powder, free of visible foreign matter
Whiteness (WG)	%	≥ 96
Loss on ignition (1000°C)	%	≤ 8.5
Loss on drying (105°C)	%	≤ 10
PH (5% Aqueous solution)		6.5-8.5
Total Salts (Na ₂ SO ₄ + NaCl)	%	≤ 2
SiO ₂ content	%	≥ 96
Fe Content	mg/kg	≤ 350
Sulfide	/	Negative
Pass on sieve 325	%	≥ 98
Water absorption	ml/20g	43-58
Oil absorption	ml/100g	≥220
Apparent density	g/ml	<0.2
Refractive index		1.435-1.460
Transparent index	%	≥90
Heavy metal as Pb	mg/kg	≤ 15
Arsenic	mg/kg	≤ 2
Aerobic bacterial count	cfu/g	≤ 200
Mold & Yeast	cfu/g	≤ 100
Thermotolerant coliform bacteria	cfu/g	Not detected

Certification:

- Production site is certified according to ISO 9001, ISO22000 and has implemented Good Manufacturing Practices.
- Meets USP-NF “Dental-Type Silica” and EP “Silica, Dental type” monographs listed as “derived mineral ingredient” in the Annex D of ISO 16128-1 with the INCI name Hydrated silica.
- Conforms with COSMOS (as non-organic raw material)
- HALAL certified and KOSHER certified.

CAS Number: 7631-86-9

Packaging:

10 KG per paper bag, supersack or customized upon request.

Storage suggestions:

Store in cool and ventilated warehouse; Avoid moisture; Avoid direct sunlight; Keep the bag sealed.

Storage stability:

AFSIL® DT 220	24 months
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To ensure that product properties and application behavior remain unchanged, our silicon dioxide ought to be stored in closed and dry premises protected against exposure to volatile substances. Strict observance of optimum storage conditions ensures prolonged usability, nevertheless we recommend not to exceed a storage period of approximately two years.

Product safety

Information concerning the safety of this product is listed in the corresponding Material Safety Data Sheet.