



ZANDOSIL® 30, 30P and 30T

Pyrogenic silica for industrial applications

Heraeus Covantics is a leading supplier of high-purity silica products for various industries such as optical fiber processing and semiconductor manufacturing equipment. Our products, including fumed silica powders, have the highest purity and minimal surface area resulting from highly developed clean-room manufacturing processes in Bitterfeld-Wolfen, Germany.

ZANDOSIL® is renowned for its adaptability and efficacy in a multitude of industrial applications, serving as a critical raw material or functional additive. Custom solutions are available to meet individual application demands, thanks to the expertise of our pyrogenic silica team.

Key Attributes of ZANDOSIL® include:

- **High Purity:** Crafted to the highest standards, ZANDOSIL® is free from impurities and chlorine, guaranteeing superior performance and quality.
- **Chemical Stability:** Its robust chemical stability protects properties and performance under tough conditions or against harsh substances.
- **Thermal Stability and Insulation:** Able to endure high temperatures, ZANDOSIL® fits thermal-stable applications while offering effective insulation for thermal management and electrical purposes.
- **Flow Properties:** Its optimal flow properties make integration into molding, casting, and bonding processes easy, thus ensuring uniform results.
- **Ease of Handling:** Designed with the user in mind, ZANDOSIL® simplifies process integration, being both user-friendly and easy to handle.

Applications

ZANDOSIL® 30 is our standard product, known for its versatility across various industries as a raw material or functional additive. Its multifunctional applications and high purity, free from impurities and chlorine, ensure superior performance. Thorough testing and qualification are essential before use.

ZANDOSIL® 30P is a high-purity form of ZANDOSIL® 30. A 100 µm sieving process removes coarser particles, ensuring exceptional purity. This makes it ideal for applications where even the smallest impurities must be eliminated.

ZANDOSIL® 30T is a modified form of ZANDOSIL® 30 with added titanium, which enhances particle size, stability, and surface charge. These improvements increase efficiency in various applications. Additionally, titanium enhances the thermal properties of fumed silica, making it particularly suitable for high-temperature environments and innovative industrial solutions.



Characteristics:

	ZANDOSIL® 30 / 30P	ZANDOSIL® 30T
Appearance	white, fluffy powder	white, fluffy powder
Silicon dioxide content (dried material) (wt. %)	> 99.99	> 99.99
Crystal structure	amorphous	amorphous
property in contact with water/moisture	hydrophilic	hydrophilic
Bulk density (g/l)	approx. 200	approx. 400
Residue from sieving (ref. to DIN EN ISO 787-7) (wt. %)	< 0.1	< 0.5
BET-surface area (m²/g)	30 ± 5	25 ± 10
Particle size D ₅₀ (µm)	approx. 9	approx. 0.3
pH of substance dispersed in water (4 %)	4.8 ± 0.3	4.8 ± 0.3
Loss on drying (2 h at 105 °C) (wt. %)	0.2 ± 0.1	1.7 ± 0.1
Loss on ignition (2 h at 1000 °C) (wt. %)	0.7 ± 0.1	1.5 ± 0.1
Chlorine content (wt. %)	0	0

Packaging and Storage

Standard packaging units are Big Bags of 2 m³ size or 50 L and 170 L drums with inner layer, shipped on pallets as well as paper bags of 15 kg content (600 kg per pallet). Other packaging options are available upon request. It is recommended to store the product in its original packaging protected from moisture.

Safety Instructions

The safety data sheet includes all relevant instructions for handling. Please contact our office (address given below).

HERAEUS COVANTICS HEADQUARTERS

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