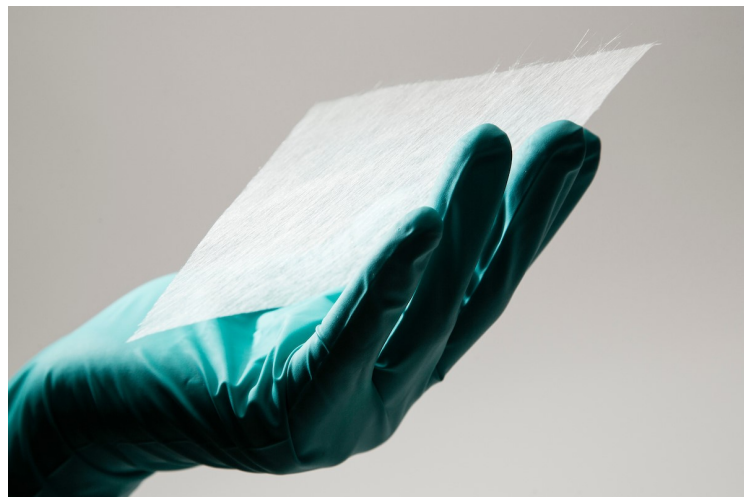


Quartzel® Veil

Since 1922, Saint-Gobain Quartz formerly known as Quartz & Silice has been a solution provider to Aeronautic, Defense and Railway industries. Based in Nemours (France) and also in Louisville, KY (US), Saint-Gobain Quartz is recognized as the world-wide leader in the production of fused quartz fibers commercialized under the brand name Quartzel®.



Quartzel® fiber is a homogeneous, non-porous, continuous, amorphous, ultra-pure silica glass with a SiO₂ content ≥ 99.95%. Quartzel® veils are made from Quartzel® yarns which are chopped and then processed into veils through wet-laid process.

Applications

Heat insulation at elevated temperature

- Thermal protection systems (TPS) of space launchers
- Satellite thermal protection
- Fireproof composite layer for aerospace

Reinforcement for composites

- Stealth material for airborne, ground & marine military programs
- Very thin composites with low area density for electronic & multi-purpose substrates or luxury goods

Main properties

- Outstanding electromagnetic properties thanks to the lowest dielectric constant and dielectric loss among mineral materials (resp. 3.74 and 0.0002 at 10 GHz)
- Non pollutant material with SiO₂ content above 99,95%
- Low CTE ($0.54 \times 10^{-6} \text{ K}^{-1}$) & good resistance to thermal shock
- Integrity as insulating material up to 1050°C

STORAGE

Quartzel® veil properties are guaranteed for 24 months when properly stored indoors, protected from direct sunlight exposure and in its original packaging. Store preferably at less than 35°C, avoiding humidity consistently higher than 80%.

Dual-use disclaimer: Quartzel® products are all classified as a dual-use commodity by the European and US authorities. Therefore, an export license is required to export these goods to some countries. Our team will support you in this process.

The information given in this data sheet is believed to be accurate and reliable. However it is the users responsibility to determine whether the material is suitable for their particular application, process and/or environment. This data sheet may be modified without prior notice. Quartzel® is a registered trademark of Saint-Gobain Quartz S.A.S. Version VE-A4-EN-07/19 - All rights reserved

<https://www.quartz.saint-gobain.com/>

TECHNICAL DATA & VEIL NOMENCLATURE

SiO₂ content ≥ 99.95%

Fiber technical data

- Fiber diameter: 9-14µm
- Fiber length: >5mm

Veil technical data

- Surface density: 10-50g/m²
- Standard binder: PVA/Phenoxy
- Thickness: 0.1-0.5mm

Product width: from 100mm to 2100mm.

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