

Quartzel[®] felts

Low Density

INTRODUCTION

Saint-Gobain Quartz S.A.S. was established in 1922 as a subsidiary company of the Saint-Gobain Group and started manufacturing fused quartz yarn in 1963 in Nemours (France).

Saint-Gobain Quartz is recognized as world-wide leader in the production of fused quartz fibers which are commercialized under the brand name Quartzel[®].

Saint-Gobain Quartz U.S.A. has been manufacturing Quartzel[®] yarn since 1988 in Louisville, Kentucky.

Quartzel[®] fiber is homogeneous, non-porous, continuous, amorphous, ultra-pure silica glass with an SiO₂ content $\geq 99.95\%$).

Quartzel[®] low density felts are produced from 9 microns Quartzel[®] wool. The wool is impregnated with an organic binder, and the density of the resulting product is increasing from a few kg/m³ to approximately 10-20 kg/m³ (0.62-1.25 lb/ft³). The impregnated wool is called felt.

APPLICATIONS

High temperature insulation in aircraft engine environment

- Quartzel[®] felts are very often used between 2 welded foils of refractory alloys
- Quartzel[®] felts are recognized for their superior insulation performance / weight ratio, good resistance to vibrations, high life cycle

Domestic and industrial catalytic heaters as support for the catalyst

- Good mechanical integrity after long term exposure
- Quick start-up due to its excellent oxidation
- Easy to cut
- Suitable with low quality gases
- Homogeneous product from one sheet to another

Furnace closures and insulation

- Industrial furnaces
- Silicon wafer treatment

STANDARD PRESENTATION

Areal weight (g/m ²)	Approximate density (kg/m ³)	Binder type	Maximum Available Dimension (mm)	Quantity per carton	Carton Dimensions (mm)
65 g/m ²	10-20	PVA*	3500 x 1000	15 x 3.5 = 52.5 m ²	L1330 x W650 x H650
80 g/m ²	10-20	PVA*	3500 x 1000	15 x 3.5 = 52.5 m ²	L1330 x W650 x H650
100 g/m ²	10-20	PVA*	3500 x 1000	15 x 3.5 = 52.5 m ²	L1330 x W650 x H650

*Polyvinyl Alcohol

Felts can be cut as per customer's requirements (cutouts in rectangular shapes, example 1000 x 500 mm)

Felts can be supplied with a mesoporous coating to increase the specific surface up to 80 g/m²

TECHNICAL DATA

Thermal conductivity

Temperature (°C)	Λ (mW/m/K)
20	35
100	50
200	80
300	127
400	191
500	274

Material tested: 80 g/m² felt at a density of 26 kg/m³ according to ISO ISO 8302 (hot guarded plate)

OTHER PRESENTATION

For **denser material** a specific range of **Needle Punched Felts** has been specifically designed with a standard areal weight of 1000 g/m². Feel free to contact us for more information on this product

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 his 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.

Dec. 2016

SAINT-GOBAIN QUARTZ S.A.S.

B.P. 102

77793 NEMOURS CEDEX, FRANCE

Tel : (33) (0) 1 64 45 45 00

E-Mail : quartz.sales@saint-gobain.com

SAINT-GOBAIN QUARTZ U.S.A.

7201 Distribution Drive

40258 Louisville, Kentucky, USA

Tel : +1 502-933-1005

E-Mail : quartz.sales@saint-gobain.com