

# Product Data Sheet



## Rockforce® RF825–Roxul® 1000

Engineered mineral fibre for reinforcement in Thermoplastics

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Rockforce® RF825–Roxul®1000 is an engineered mineral fibre with an aminosilane surface treatment. The product is developed for reinforcement in various thermoplastics and offers a set of mechanical properties at unique price/performance balance.

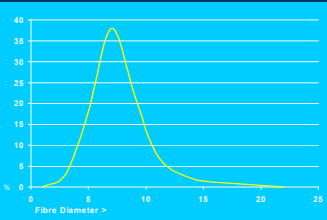
### Roxul®1000 chemistry =biosoluble chemistry

All Roxul®1000 products are worldwide exonerated from classification as a carcinogen.

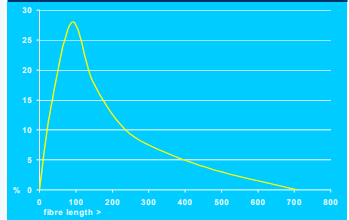
### Chemical Analysis

	Min.	Max.
SiO <sub>2</sub>	38 %wt	43 %wt
Al <sub>2</sub> O <sub>3</sub>	18 %wt	23 %wt
CaO+MgO	23 %wt	28 %wt
FeO	4.5 %wt	8 %wt
K <sub>2</sub> O+Na <sub>2</sub> O		4.5 %wt
Others		6 %wt

Typical average fibre diameter



Typical average fibre length



### ADVANTAGES OF ROCKFORCE® RF825–ROXUL®1000

- excellent controlled dimensional stability/CLTE and high HDT.
- improved scratch resistance and surface quality.
- low abrasion; less machine wear compared to glass fibres.
- reduced tendency for warpage.
- good weld line strength.
- In polar matrixes like PA, ABS, PC or PBT the interaction between aminosilane treated fibre and the matrix is normally sufficient enough to obtain the desired reinforcing properties.
- In non-polar matrixes (such as e.g. PP) however; the addition of a compatibiliser (e.g. maleic anhydride modified PP) is needed to get a chemically coupled mineral fibre compound. This will give increased mechanical and thermo-mechanical properties.

Parameter	Average/Tolerance	Testmethod
Non-Fibrous Material	Norm. Max. N > 125 µm 0.1%wt 0.2%wt	TV 316
Fibre Length	150 ± 25 micron	TV 305
Ignition Loss	max. 0.3 %wt	TV 302
Moisture Content	max. 0.1 %wt	TV 302
Fibre diameter (mass wt. av.)	approx. 9.0 micron	TV 165
Fibre diameter ( num. av.)	approx. 5.5 micron	TV 165
Specific surface area	approx. 0.20 m <sup>2</sup> /g	TV 165
Melting Point	> 1000 °C	Furnace, Visual
Specific Density	2.75 ± 0.15 g/cm <sup>3</sup>	
Colour	Grey/Green	Visual

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ISO 9001 LF007.F08