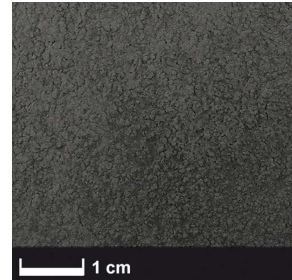


Technical data

Carbon fibre milled extra fine 0.1 mm

Description

- Yields lightweight, hard filling compounds
- For epoxy, polyester and vinyl ester resins



Milled carbon is made from recycled fibres. The carbon fibres used therefore are equipped largely with PU-sizing. Most of the sizing evaporates due heat generated at the milling process though. When dry the milled fibres form fibre balls, which dissolve and spread out evenly in resin.

Application

Manufacture of electrically conductive coatings and adhesives, reinforcement of moulding and fillings.

	Unit	Value
Carbon fibres content*	%	100 (99.8)
from which ex-PAN fibres*		100 (99.8)
Carbon content*	%	94 (92)
Remaining sizing level*	%	> 0.2
Density (continuous fibre)*	g/cm ³	1.7 < d < 2.0
Mono filament diameter*	µm	7 ± 2
Volume resistivity* average volume resistivity of n (n > 1000) monofilaments	µΩm	15 (max. 20)
Tensile strength*	MPa	3500 (3000)
Elongation at break*	%	1.5 (1.2)
Tensile modulus*	GPa	230 (200)
Median length*	µm	100 ± 20
> 80 µm (mass distribution)*	%	65 ± 5
Bulk density*	kg/dm ³	0.35 ± 0.05
Metal contamination**	g/1000 g	< 0.5

*Average values obtained from technical data sheets of producers of ex-PAN "high-strength" fibres that we use in our mixture for more than 90 %. The ≤ 10 % remaining are "high modulus" fibres from the same producers, i.e. Torayca®, TOHO-Tenax, CYTEC... All these values are given a rough guide and do not in any way engage R&G's responsibility.

**All our milled fibres are purified through powerful magnets separators. Although very rare, some metal particles remain possible. An X-rays check permits the elimination of particles from 1 mm³ (Pb, Cu, Fe) to 5 mm³ (Al) depending on metal density, aluminium chips or sheets, even of several cm², can't be detected.

Health and safety: Carbon fibres are not dangerous for health. However, as short fibres and dusts, the cause irritation on skin, eyes, respiratory tract, the sizing sometimes causes allergies. People will have to wear dust protections like face masks, spectacles, light overalls, gloves. **WARNING! CARBON FIBRES CONDUCT ELECTRICITY!**