

rayon-based carbon fibres

Carbon fibres made from rayon (cellulose) precursor fibres.

Note:

Rayon-based carbon fibres have a more isotropic structure than similarly heat-treated polyacrylonitrile (PAN)- or mesophase pitch (MPP)-based carbon fibres. Their Young's modulus values are therefore drastically lower (100 GPa; tensile strength 100 MPa). Rayon-based carbon fibres can be transformed into anisotropic carbon fibres with high strength and Young's modulus values by hot-stretching treatment at temperatures of approximately 2800 K.

Source:

PAC, 1995, 67, 473 (*Recommended terminology for the description of carbon as a solid (IUPAC Recommendations 1995)*) on page 503