

**Technische Daten**  
**Carbon-Rohr PrePreg**  
*technical data*  
*carbontubes PrePreg*



Carbon-Rohr, PrePreg gewickelt, geschliffen und hochglanz lackiert.  
*Carbon-tube, PrePreg, polished and high glossy*



<b>Faserorientierung</b> <i>fiber alignment</i>	Bidirektional 0°/90°
<b>Gewebeart</b> <i>fabric</i>	Köper 2/2
<b>Faservolumenanteil</b> <i>fiber volume</i>	ca./aprox. 60 %
<b>Oberflächen</b> <i>surface</i>	Beidseitig glatt, sichtbare Struktur, matt glänzend <i>both sides smooth visibel structure, shiny</i>
<b>Temperaturbeständigkeit</b> <i>temperature resistance</i>	bis 110°C <i>up to 110 °C</i>
<b>Biegefestigkeit</b> <i>flexural strength</i>	0°=1050 MPa 90°=900 MPa
<b>Biege-E-Modul</b> <i>flexural-E-Modul</i>	0°=62 GPa 90°=60 GPa
<b>ILS</b>	0°=68 MPa 90°=0 MPa
<b>Zug-E-Modul</b> <i>tesile-E-Modul</i>	0°=60 GPa 90°=60 GPa
<b>Zugfestigkeit</b> <i>tensile strength</i>	0°=950 MPa 90°= 900 MPa
<b>Bruchdehnung</b> <i>fracture strain</i>	1,6-1,7%
<b>Dichte</b> <i>density</i>	1,5-1,6g/cm <sup>3</sup>
<b>Wärmeausdehnung</b> <i>thermal expansion coefficient</i>	-0,1 * 10 <sup>-6</sup> *K <sup>-1</sup> zur Faser längs <i>along the fiber</i>
<b>röntgentransparent</b> <i>radiolucent</i>	21 * 10 <sup>-6</sup> *K <sup>-1</sup> zur Faser quer <i>crosswise the fiber</i>
<b>elektrischer Widerstand</b> <i>specific elctrical resistance</i>	99 %
<b>Wärmeleitfähigkeit</b> <i>heat conductivity</i>	1,6*10 <sup>-3</sup> Ohm*cm
<b>spezifische Wärmekapazität</b> <i>specific heat capacity</i>	17 [W/(m*K)]
<b>Schwingungsfest</b> <i>no vibrations</i>	710 [J/kg*K)]
<b>UV-Stabilität</b> <i>UV-resistant</i>	handelsüblichen Klarlack aufbringen <i>by using standard varnish</i>
<b>Korrosionsbeständigkeit</b> <i>corrosion-resistant</i>	z.B. Benzin, Öl, Salzwasser, Fluorwasserstoffsäure <i>e.g. petrol, oil, saltwater, hydrofluoric acid</i>
<b>Bearbeitung</b> <i>handling</i>	bohren, fräsen, sägen, kleben <i>drill, mill, cutt, glue</i>

**Gewichtsübersicht** *weights:*

Durchmesser/ <i>diameter</i>	Gramm/Meter <i>Gramms/Meter</i>								
5,0x4,0	12	12,0x10,0	46	18,0x16,0	77	24,0x23,0	53	30,0x27,0	225
6,0x5,0	13	12,0x11,0	26	18,0x17,0	40	25,0x23,0	90	30,0x28,0	155
7,0x5,0	27	13,0x11,0	52	19,0x17,0	75	25,0x24,0	56	32,0x30,0	180
8,0x6,0	30	13,0x12,0	28	19,0x18,0	42	26,0x24,0	134	35,0x32,0	245
8,0x7,0	17	14,0x12,0	56	20,0x18,0	87	26,0x25,0	62	40,0x36,0	370
9,0x7,0	35	14,0x13,0	31	20,0x19,0	44	27,0x24,0	220	45,0x41,0	415
9,0x8,0	19	15,0x13,0	58	21,0x20,0	47	27,0x25,0	150	50,0x46,0	465
10,0x8,0	40	15,0x14,0	33	22,0x21,0	49	28,0x24,0	276	55,0x51,0	510
10,0x9,0	22	16,0x14,0	66	23,0x22,0	51	28,0x26,0	144	60,0x56,0	560
11,0x9,0	45	16,0x15,0	35	24,0x21,0	162	29,0x27,0	174		
11,0x10,0	24	17,0x16,0	37	24,0x22,0	123	30,0x26,0	295		

aktualisiert am 7. Oktober 2010

Alternative Begriffe: Kohlefaserrohre, Carbonrohre, CFK-Rohre, Karbonrohre