

Competitive Green Technologies

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World-leading biomaterials technology

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TECHNICAL DATA SHEET

Bio-Composite Resin: CGTECH - BCR - HMS30/40

Process Reference: AL007-6

Product Description:

The properties below are typical of CGTech bio-carbon reinforced hi flex hi stiffness polypropylene bio-composite compounded resin that substitutes 30 & 40% Talc Filled Polypropylene

Physical Properties	CGTech - Typical Values*	Test Method	40% TFPP WSS-M4D643-B1
Melt Flow	16 g/ 10 min @230°C,2.16Kg	ASTM D1238	15 g / 10 min @230°C, 2.16Kg
Bio-content	20%	C14 dating New carbon**	40% Talc - no new carbon
Notched Izod Impact @ 23°C	40 J/m	ASTM D256	15 J/m
Un-Notched Izod Impact @ 23°C	307 J/m	ASTM D4812-11	275 J/m
Tensile Strength @ Yield (5mm/min)	51 MPa	ASTM D638	24 MPa
Flexural Modulus (14mm/minute)	3.50 GPa	ASTM D790	3.2 GPa
Flexural Strength (14mm/minute)	72 MPa	ASTM D790	40 MPa
Heat Distortion Temperature	140 °C	D 648-DMA-Q800	148°C
Mould Shrinkage	0.014-0.016 cm/cm	ASTM D 955	N/A
Density	1.02 gm/cc	ASTM D 256	1.24 gm/cc

Note: *Values provided are typical and should not be interpreted as product specification.

The results reported are typical with the caveat that due to variable processing methods and conditions, no guarantees or warranties are expressed or implied, including expressions of fitness for purpose or merchantability.

This is a patent pending formulation.

^{**}We have used patent pending Bio-Carbon substitute which has been certified by USDA as per label above as 99% new carbon.