

# carbonauten® HP Tech BioC 50/70/0.3 ET

HP Technical biocarbon composite to help reduce CO2 emissions

### Description

carbonauten® HP Tech BioC 50/70/0.3 ET is a bio-composite that is composed of Polypropylene Homopolymer and 50% biocarbon developed for thermoforming and extrusion applications. Products originating from this grade have a good balance of stiffness and impact strength at ambient temperatures in combination with reduced CO2 footprint.

This grade is offered in a form that has a black color.

### Applications

- Thermoforming
- Pipe extrusion
- Extruded sheets and profiles
- Injection Moulded fittings

### Sustainability

carbonauten® HP Tech BioC 50/70/0.3 ET bio-composite contains bio-based biocarbon primarily obtained from woody waste residues. The CO2 footprint is calculated to -1,35 kg CO2 equivalent/kg. Compared to a conventional HP product, you save 2,6 kg CO2 equivalent/kg.

### Characteristics

Physical Properties/Typical Value

Property	Unit	Test Method	Test Condition	Value
Melt Volume Flow Rate	g/10 min	ISO 1133	220°C /2.16 kg	0.3
Density	g/cm <sup>3</sup>	ISO 1183		1.06
Tensile Strength	MPa	ISO 527	23°C	31
Izod Impact Strength	kJ/m <sup>2</sup>	ISO 180/A	23°C	1.4
Tensile Modulus	MPa	ISO 527-2	23°C	3.100

*The information above represents average values for several attributes and is intended as a general guide only. Please do not interpret them as specifications.*

### Packaging and storage

Our products are packed and shipped in 25 kg bags. Bags are tightly sealed and should be opened only immediately prior to processing. Optionally, the product can also be supplied in big bags.

carbonauten® HP Tech BioC 50/70/0.3 ET bio-composite shall be kept in a dry environment and shielded from UV rays. Unsuitable storage conditions may negatively affect product quality.

### Recommended processing parameters

The moisture content of the carbonauten® HP Tech BioC 50/0.3-70 ET prior to processing shall be lower than 3%.

For pipe extrusion, the following parameters should be used as guidelines:

Cylinder temperature:	200-220 °C
Extruder head temperature:	210-220 °C
Die temperature:	210-230 °C
Melt temperature:	210-230 °C

For thermoforming, the processing conditions will depend on the type of equipment used.

Specific recommendations for processing conditions can be determined only when the application and type of equipment are known. Please contact the carbonauten polymers technical team for such particulars.

# carbonauten polymers

the minus CO2 factory

## **Disclaimer**

The product(s) mentioned herein are not intended to be used for medical, pharmaceutical, or healthcare applications and we do not support their use for such applications. To the best of our knowledge, the information contained herein is accurate and reliable as of the date of publication, however we do not assume any liability whatsoever for the accuracy and completeness of such information. carbonauten GmbH makes no warranties that extend beyond the description contained herein. Nothing herein shall constitute any warranty of merchantability or fitness for a particular purpose. It is the customer's responsibility to inspect and test our products to satisfy themselves as to the suitability of the products for the customer's particular purpose. The customer is responsible for the appropriate, safe, and legal use, processing, and handling of our products. No liability can be accepted in respect of the use of carbonauten products in conjunction with other materials. The information contained herein relates exclusively to our products when not used in conjunction with any third-party materials.

## **Company Information**

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