

ALTECH PA6 ECO 7010/100 CF10

(Last update: 26.09.2018)

Base Polymer	Polyamide 6, Polymer recyclate
Filler/Additive System	10 % carbon fibres
Special Features	Carbon fiber recyclate, antistatic, heat ageing stabilisation, high surface quality, low density, low warpage
Market Segment	Automotive, Machinery
Application Area	injection moulded parts, Light weight
Typical Applications	engine cover, housings, functional components

Pre-Drying Conditions	80 °C in a dry air (dessiccant) dryer for 2-12 h dependant on moisture content max. moisture content <0,15 %
Processing Conditions	injection moulding melt temperature 270-290 °C injection moulding mould temperature 80-100 °C
Storage	dry, protected from light

Properties	Value	Dimension	Test Norm
Mechanical Properties			
Flexural modulus	6000	MPa	ISO 178
Flexural strength	160	MPa	ISO 178
Tensile modulus	7000	MPa	ISO 527
Tensile strength at break	105	MPa	ISO 527
Tensile elongation at break	5	%	ISO 527
Charpy impact strength 1eU	55	kJ/m ²	ISO 179/1eU
Charpy notched impact 1eA	4	kJ/m ²	ISO 179/1eA
Thermal Properties			
Vicat B50	205	°C	ISO 306
HDT / A (1,8 MPa)	185	°C	ISO 75-1/-2
DSC (Melt Point)	222	°C	ISO 11357
Electrical Properties			
Surface resistance max.	5E11	Ohm	IEC 62631-3-2
Rheological Properties			
Shrinkage - lengthwise (24h)	0.3 - 0.7	%	ISO 294-4
Shrinkage - lateral (24h)	0.4 - 0.8	%	ISO 294-4
Physical Properties			
Density	1170	kg/m ³	ISO 1183

In general the existence of residual amounts of ferrous and non-ferrous metals cannot be completely ruled out in recyclate feed stocks. In order to minimise potential negative effects of such inclusions, ALBIS employs state of the art extensive metal (and non-metal) detection

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and separation systems in the production of its ALTECH ECO compounds. However, even the highest product quality assurance processes cannot guarantee zero levels of ferrous and non-ferrous metal in the final product. To further reduce risk, moulders are therefore advised to deploy their own detection and separation techniques. In particular, special measures are advised to be employed with hot runner tools. For any questions or advice concerning development of parts with ALTECH ECO grades please contact our TSAD department.

These are guide values and not a specification. The test values mentioned are representative values only and not binding minimum or maximum figures. These test values have been determined on standardised test specimens and can be affected by pigmentation, mould design and processing conditions.

Any information given on the chemical and physical characteristics of our products, including, without limitation, technical advice on applications, whether verbally, in writing or by testing the product, is given to the best of our knowledge and in good faith and does not exempt the buyer from carrying out their own investigations and tests in order to ascertain the product's specific suitability for the purpose intended. The buyer is solely responsible for confirming the suitability of the product for a particular application, its utilization and processing and must observe any applicable laws and government regulations. **NO EXPRESS OR IMPLIED RECOMMENDATION OR WARRANTY IS GIVEN WITH REGARD TO THE SUITABILITY OF THE PRODUCT FOR A PARTICULAR APPLICATION, SUCH AS, BUT NOT LIMITED TO, SAFETY-CRITICAL COMPONENTS OR SYSTEMS.**

Healthcare uses: the supply of any product by ALBIS for any medical, pharmaceutical or diagnostic application is conditional to an assessment by ALBIS in terms of compliance with ALBIS' internal risk management policy – even for products which are in general designated for use in Healthcare applications.

Important: irrespective of product type or designation, ALBIS does not recommend or support the use of any products it supplies which fall into the following medical, pharmaceutical or diagnostic application categories:

- risk class III applications according to EU directive 93/42/EEC
- any bodily implant application for greater than 30 days
- any critical component in any medical device that supports or sustains human life.

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