

AKROMID® PRELIMINARY

T5 ICF 20 black (6773)

PPA CF20

AKROMID® T5 ICF 20 black (6773) is a 20% carbon fibre reinforced polyphthalamide with good flexural strength and good sliding properties

Properties

Modulus

18.000 MPa

Strength

222 MPa

Impact

37 kJ/m²

Mechanical Properties

Tensile modulus

ISO 527-2

1 mm/min | d.a.m.

18000 MPa

Tensile stress at break

ISO 527-2

5 mm/min | d.a.m.

222 MPa

Tensile strain at break

ISO 527-2

5 mm/min | d.a.m.

1,6 %

Charpy impact strength

ISO 179-1/1eU

23°C | d.a.m.

37 kJ/m²

Thermal Properties

Melting temperature

ISO 11357-3

DSC, 10K/min

325 °C

General Properties

Density

ISO 1183

23°C

1,28 g/cm³

Molding shrinkage

ISO 294-4

flow

0,1 - 0,3 %

transverse

0,5 - 0,7 %

Electrical Properties

Surface resistivity

IEC 62631-3-2

d.a.m.

$10^5 \Omega$

Processing

The values mentioned are recommendations. We only recommend desiccant / dry air dryers or vacuum dryers. Too long a drying time and the resulting residual moisture content below the lower limit can lead to filling problems and surface defects. The specified drying time refers to closed and undamaged bagged material. When processing from previously opened bags or from octabins with polyolefin inliners, a longer drying time may be necessary. It is recommended to check the residual moisture content after the drying process.



(D) Drying time	0 - 4 h
Drying temperature ($\tau \leq -30^{\circ}\text{C}$)	120 $^{\circ}\text{C}$
Processing moisture	0,02 - 0,1 %
(1) Feed section	60 - 90 $^{\circ}\text{C}$
(2) Temperature Zone 1 - Zone 4	320 - 350 $^{\circ}\text{C}$
(3) Nozzle temperature	330 - 360 $^{\circ}\text{C}$
(4) Melt temperature	330 - 350 $^{\circ}\text{C}$
(5) Mold temperature	120 - 160 $^{\circ}\text{C}$
(→) Holding pressure, spec.	300 - 800 bar
(←) Back pressure, spec.	50 - 150 bar
Injection speed	medium to high
Screw speed	8 - 15 m/min

Diagrams

