

Technical Data Sheet



ALCOM TCD PA6 5070 FR 15021

Base Polymer	Polyamide 6
Filler/Additive System	special filler
Special Features	thermal conductive,electrically insulating,heat stabilised,halogen-free flame retardant
Market Segment	Automotive,Machinery,electrical and electronic,Lighting
Application Area	radiator systems,cooling system
Typical Applications	housings,functional components,plugs / connectors,lamp sockets

Pre-Drying Conditions 80 °C in a dry air (dessiccant) dryer
for 2-12 h
max. moisture content <0,12 %

Processing Injection Moulding melt temperature 280-300 °C
mould temperature 100-120 °C

Storage dry, protected from light

Properties	Value	Dimension	Test Norm
Mechanical Properties			
Flexural Modulus	15000	MPa	ISO 178
Flexural Strength	135	MPa	ISO 178
Tensile Modulus	15000	MPa	ISO 527
Tensile Strength at Break	80	MPa	ISO 527
Tensile Elongation at Break	0.8	%	ISO 527
Impact Strength (Charpy, 23°C)	15	kJ/m ²	ISO 179/1eU
Notched Impact Strength (Charpy, 23°C)	3	kJ/m ²	ISO 179/1eA
Thermal Properties			
Vicat B50	210	°C	ISO 306
HDT / A (1,8 MPa)	180	°C	ISO 75-1/-2
DSC (Melt Point)	220	°C	ISO 11357
Thermal Conductivity (Integral)	2.1	W/(m K)	ISO 22007-2
Thermal Conductivity (in-plane)	3.6	W/(m K)	ASTM E 1461
Thermal Conductivity (through-plane)	1.5	W/(m K)	ASTM E 1461
Specific Heat Capacity	1.35	J/(g K)	-
Electrical Properties			
Surface Resistance	1E12	Ohm	DIN EN 62631-3-2
Tracking Resistance (CTI)	600	-	IEC 60112
Dielectric Strength	27	kV/mm	IEC 60243-1
Rheological Properties			
Spiral Flow (2 mm wall thickness)	20	cm	-

Technical Data Sheet



ALCOM TCD PA6 5070 FR 15021

(Last update: 28.11.2019)

Physical Properties

Density	1760	kg/m ³	ISO 1183
---------	------	-------------------	----------

Flammability

Flammability (0.75 mm)	V-0	class	UL 94
Yellow Card available	yes	-	-
Flammability (1.5 mm)	V-0	class	UL 94
Yellow Card available	yes	-	-
Flammability (3.0 mm)	V-0	class	UL 94
Yellow Card available	yes	-	-
Glow Wire (GWFI, 960 °C, 1.0mm)	passed	-	DIN EN 60695