ALTECH® PA6 A 2030/109 GF30

Polyamide 6

MOCOM Compounds GmbH & Co. KG

PROSPECTOR®
www.ulprospector.com

Technical Data

Product Description

Base Polymer
Polyamide 6

Filler/Additive System
30 % glass fibres

Colour
black, blue, brown, grey, natural color, red, orange, white, yellow, violet

Special Features
heat stabilised, easy release (demoulding), easy flow, processing stabilised, nucleated

Market Segment
Automotive, Machinery, building and construction

Application Area
injection moulded parts, exterior parts, interior decoration / finishing, engine and drive systems

Typical Applications
housings, different automotive powertrain parts, functional components, operating elements, handles, dowels

General

Material Status	• Commercial: Active		
UL Yellow Card [1]	• E80168-250649		
Search for UL Yellow Card	• MOCOM Compounds GmbH & Co. KG • ALTECH®		
Availability	• Asia Pacific	• Europe	• North America
Filler / Reinforcement	• Glass Fiber, 30% Filler by Weight		
Additive	• Heat Stabilizer	• Nucleating Agent	• Processing Aid
Features	• Good Flow • Good Mold Release	• Heat Stabilized • Nucleated	
Uses	• Automotive Applications • Automotive Under the Hood	• Construction Applications • Handles	• Housings • Machine/Mechanical Parts
RoHS Compliance	• Contact Manufacturer		
Appearance	• Black • Blue • Brown • Grey	• Natural Color • Orange • Red • Violet	• White • Yellow
Processing Method	• Injection Molding		

Physical	Dry	Conditioned	Unit	Test Method
Density	1.36	--	g/cm^3	ISO 1183
Molding Shrinkage				ISO 294-4
Across Flow : 24 hr	0.60 to 0.80	--	%	
Flow : 24 hr	0.20 to 0.40	--	%	

Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus	1.31E+6 (9000)	812000 (5600)	psi (MPa)	ISO 527-1
Tensile Stress (Break)	24700 (170)	13100 (90.0)	psi (MPa)	ISO 527-2
Tensile Strain (Break)	3.0	6.0	%	ISO 527-2
Flexural Modulus	1.16E+6 (8000)	682000 (4700)	psi (MPa)	ISO 178
Flexural Stress	34800 (240)	21000 (145)	psi (MPa)	ISO 178
Impact	**Dry**	**Conditioned**	**Unit**	**Test Method**
Charpy Notched Impact Strength				ISO 179/1eA
-40°F (-40°C)	3.3 (7.0)	--	ft·lb/in² (kJ/m²)	
73°F (23°C)	4.8 (10)	9.0 (19)	ft·lb/in² (kJ/m²)	
Charpy Unnotched Impact Strength				ISO 179/1eU
-40°F (-40°C)	26 (55)	--	ft·lb/in² (kJ/m²)	
73°F (23°C)	33 (70)	36 (75)	ft·lb/in² (kJ/m²)	
Thermal	**Dry**	**Conditioned**	**Unit**	**Test Method**
Deflection Temperature Under Load				ISO 75-2/A
264 psi (1.8 MPa), Unannealed	410 (210)	--	°F (°C)	
Melting Temperature	428 (220)	--	°F (°C)	ISO 11357-3
Flammability	**Dry**	**Conditioned**	**Unit**	**Test Method**
Flame Rating (0.030 in (0.75 mm))	HB	--		UL 94

Injection	Dry (English)	Dry (SI)
Drying Temperature - Desiccant Dryer	176 °F	80 °C
Drying Time - Desiccant Dryer	2.0 to 12 hr	2.0 to 12 hr
Suggested Max Moisture	0.15 %	0.15 %
Processing (Melt) Temp	518 to 554 °F	270 to 290 °C
Mold Temperature	176 to 212 °F	80 to 100 °C

Notes

[1] A UL Yellow Card contains UL-verified flammability and electrical characteristics. UL Prospector continually works to link Yellow Cards to individual plastic materials in Prospector, however this list may not include all of the appropriate links. It is important that you verify the association between these Yellow Cards and the plastic material found in Prospector. For a complete listing of Yellow Cards, visit the UL Yellow Card Search.

[2] Typical properties: these are not to be construed as specifications.