AKROLOY® PA ICF 40 black (5270)

Polyamide 66 + PA 6I/6T

AKRO-PLASTIC GmbH

Message:

AKROLOY® PA ICF 40 black (5270) is a 40% carbon fibre reinforced polyamide blend with high stiffness, good sliding properties and reduced moisture. Application areas are mechanically high stressed parts with dimensional stability and moisture independent properties

General Information	
Filler / Reinforcement	Carbon Fiber,40% Filler by Weight
Features	Good Dimensional Stability High Stiffness Low Moisture Absorption Moisture Resistant
Appearance	Black
Resin ID (ISO 1043)	PA66 + PA6I/6T CF40

Physical	Dry	Conditioned	Unit	Test Method
Density (23°C)	1.35	--	g/cm³	ISO 1183
Melt Volume-Flow Rate (MVR) (275°C/5.0 kg)	15.0	--	cm³/10min	ISO 1133
Spiral Flow	30.0	--	cm	Internal Method
Molding Shrinkage				ISO 294-4
Across Flow	0.42	--	%	
Flow	0.28	--	%	
Humidity Absorption - 62% RH (70°C)	1.3	--	%	ISO 1110
Flexural Strain at Break [1]	1.5	--	%	ISO 178
Reinforcement Content	40	--	%	ISO 1172

Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus	35000	32000	MPa	ISO 527-2/1
Tensile Stress (Break)	250	230	MPa	ISO 527-2/5
Tensile Strain (Break)	1.5	1.5	%	ISO 527-2/5
Flexural Modulus [2]	35000	--	MPa	ISO 178
Flexural Stress [3]	400	--	MPa	ISO 178

Impact	Dry	Conditioned	Unit	Test Method
Charpy Notched Impact Strength				ISO 179/1eA
-30°C	7.0	--	kJ/m²	
23°C	8.0	--	kJ/m²	
Charpy Unnotched Impact Strength				ISO 179/1eU
-30°C	50	--	kJ/m²	

23°C	50	50	kJ/m²	
Thermal	Dry	Conditioned	Unit	Test Method
Heat Deflection Temperature (1.8 MPa, Unannealed)	235	--	°C	ISO 75-2/A
Melting Temperature [4]	255	--	°C	DIN EN 11357-1
Electrical	Dry	Conditioned	Unit	Test Method
Surface Resistivity	1.0E+4	1.0E+4	ohms	IEC 60093
Flammability	Dry	Conditioned	Unit	Test Method
Burning Rate [5] (1.00 mm)	< 100	--	mm/min	FMVSS 302
Flame Rating (0.800 mm)	HB	--		UL 94

NOTE	
1.	2 mm/min
2.	2.0 mm/min
3.	2.0 mm/min
4.	10 K/min, DSC
5.	>1 mm

Recommended distributors for this material

Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China