

AKROMID® B3 ICF 40 black (5020)

Polyamide 6
AKRO-PLASTIC GmbH

Message:

AKROMID® B3 ICF 40 black (5020) is a 40% carbon fibre reinforced polyamide 6 with high flexural strength and good sliding properties
Applications are mechanically high stressed parts in all industries

General Information				
Filler / Reinforcement		Carbon Fiber,40% Filler by Weight		
Features		High Strength		
Appearance		Black		
Resin ID (ISO 1043)		PA6 CF40		
Physical	Dry	Conditioned	Unit	Test Method
Density (23°C)	1.31	--	g/cm ³	ISO 1183
Molding Shrinkage				ISO 294-4
Across Flow	0.50	--	%	
Flow	0.10	--	%	
Humidity Absorption - 62% RH (70°C)	1.9	--	%	ISO 1110
Flexural Strain at Break ¹	1.8	2.5	%	ISO 178
Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus	32000	13600	MPa	ISO 527-2/1
Tensile Stress (Break)	220	135	MPa	ISO 527-2/5
Tensile Strain (Break)	1.7	3.0	%	ISO 527-2/5
Flexural Modulus ²	25000	17000	MPa	ISO 178
Flexural Stress ³	320	215	MPa	ISO 178
Impact	Dry	Conditioned	Unit	Test Method
Charpy Notched Impact Strength				ISO 179/1eA
-30°C	8.0	--	kJ/m ²	
23°C	10	15	kJ/m ²	
Charpy Unnotched Impact Strength				ISO 179/1eU
-30°C	50	--	kJ/m ²	
23°C	60	65	kJ/m ²	
Thermal	Dry	Conditioned	Unit	Test Method
Heat Deflection Temperature (1.8 MPa, Unannealed)	210	--	°C	ISO 75-2/A
Melting Temperature ⁴	220	--	°C	DIN EN 11357-1
CLTE				ISO 11359-2
Flow : 23 to 80°C	1.7E-5	--	cm/cm/°C	

Transverse : 23 to 80°C	7.3E-5	--	cm/cm/°C	
Electrical	Dry	Conditioned	Unit	Test Method
Surface Resistivity	1.0E+3	--	ohms	IEC 60093
Flammability	Dry	Conditioned	Unit	Test Method
Flame Rating (1.60 mm)	HB	--		UL 94
NOTE				
1.	2 mm/min			
2.	2.0 mm/min			
3.	2.0 mm/min			
4.	10 K/min, DSC			

The information and data on this page are provided by manufacturers and document providers. SHANGHAI SUSHENG assumes no legal liability. It is strongly recommended to verify all technical data with material suppliers before final material selection. All rights belong to the original authors. If any infringement occurs, please contact us immediately.

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



WECHAT