AKROLOY® PARA ICF 40 black (6128)

Polyarylamide

AKRO-PLASTIC GmbH

PROSPECTOR®
www.ulprospector.com

Technical Data

Product Description

AKROLOY® PARA ICF 40 black (6128) is a 40% carbon fibre reinforced polyarylamid with good flexural strength and good tribological properties.

Components with high dimensional stability, independent from moisture content.

General

Material Status	• Commercial: Active		
Search for UL Yellow Card	• AKRO-PLASTIC GmbH		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Filler / Reinforcement	• Carbon Fiber, 40% Filler by Weight		
Features	• Good Strength	• High Dimensional Stability	
Appearance	• Black		
Resin ID	• PARA CF40		

Physical	Dry	Conditioned	Unit	Test Method
Density (73°F (23°C))	1.40	--	g/cm³	ISO 1183
Molding Shrinkage				ISO 294-4
Across Flow	0.20 to 0.40	--	%	
Flow	0.10 to 0.20	--	%	
Humidity Absorption - 62% RH (158°F (70°C))	1.0	--	%	ISO 1110

Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus	5.66E+6 (39000)	5.51E+6 (38000)	psi (MPa)	ISO 527-1/1
Tensile Stress (Break)	40600 (280)	37000 (255)	psi (MPa)	ISO 527-2/5
Tensile Strain (Break)	1.0	1.0	%	ISO 527-2/5
Flexural Modulus [2]	5.37E+6 (37000)	5.08E+6 (35000)	psi (MPa)	ISO 178
Flexural Stress [2]	60900 (420)	52200 (360)	psi (MPa)	ISO 178
Flexural Strain at Break [3]	1.2	1.1	%	ISO 178

Impact	Dry	Conditioned	Unit	Test Method
Charpy Notched Impact Strength (73°F (23°C))	2.4 (5.0)	2.4 (5.0)	ft·lb/in² (kJ/m²)	ISO 179/1eA
Charpy Unnotched Impact Strength				ISO 179/1eU
73°F (23°C)	17 (35)	17 (35)	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	446 (230)	--	°F (°C)	
Melting Temperature [4]	455 (235)	--	°F (°C)	ISO 11357-3

Form No. TDS-293272-en
Document Created: Wednesday, June 18, 2025

UL LLC ©2025. All rights reserved.
UL Prospector | 800-788-4668 or 307-742-9227 |www.ulprospector.com.

The information presented here was acquired by UL from the producer of the product or material or original information provider. However, UL assumes no responsibility or liability for the accuracy of the information contained on this website and strongly encourages that upon final product or material selection information is validated with the manufacturer. This website provides links to other websites owned by third parties. The content of such third party sites is not within our control, and we cannot and will not take responsibility for the information or content.

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 (> 0.0394 in (> 1.00 mm))	< 3.9 (< 100)	--	in/min (mm/min)	FMVSS 302
Flame Rating (0.06 in (1.6 mm))	HB	--		UL 94
Additional Information	**Dry**	**Conditioned**	**Unit**	**Test Method**
Reinforcement Content	40	--	%	ISO 1172

Notes

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

[2] 0.079 in/min (2.0 mm/min)

[3] 2 mm/min

[4] 10°C/min

Form No. TDS-293272-en
Document Created: Wednesday, June 18, 2025

UL LLC ©2025. All rights reserved.
UL Prospector | 800-788-4668 or 307-742-9227 |www.ulprospector.com.

The information presented here was acquired by UL from the producer of the product or material or original information provider. However, UL assumes no responsibility or liability for the accuracy of the information contained on this website and strongly encourages that upon final product or material selection information is validated with the manufacturer. This website provides links to other websites owned by third parties. The content of such third party sites is not within our control, and we cannot and will not take responsibility for the information or content.