

ISO 16396 - PA12, GF50, M1GHLR, C16-120

Rilsamid® AZM 50 BLACK T6LD resin is a fiberglass reinforced polyamide.

This black colored grade is designed for injection molding.

PROPERTIES	DRY / COND	UNIT	TEST STANDARD
RHEOLOGICAL PROPERTIES			
Melt Volume-Flow Rate	6 / *	cm ³ /10 min	ISO 1133
Temperature	235 / *	°C	-
	455 / *	°F	
Load	5 / *	kg	-
	11 / *	lb	
Molding Shrinkage, parallel	0.2 / *	%	ISO 294-4, 2577
Molding Shrinkage, normal	0.7 / *	%	ISO 294-4, 2577
MECHANICAL PROPERTIES			
Tensile Modulus	12000 / 12100	MPa	ISO 527-1/-2
	1.74E6 / 1.75E6	psi	
Yield Stress	153 / 145	MPa	ISO 527-1/-2
	22200 / 21000	psi	
Yield Strain	3.8 / 3.6	%	ISO 527-1/-2
Nominal Strain at Break	4.4 / 4.6	%	ISO 527-1/-2
Stress at Break	152 / 144	MPa	ISO 527-1/-2
	22000 / 20900	psi	
Strain at Break	4.6 / 4.9	%	ISO 527-1/-2
Charpy Impact Strength, +23°C	84 / 80	kJ/m²	ISO 179/1eU
	40 / 38.1	ftlb/in²	
Charpy Impact Strength, -30°C	90 / 84	kJ/m²	ISO 179/1eU
	42.8 / 40	ftlb/in²	
Charpy Notched Impact Strength, +23°C	22 / 21	kJ/m²	ISO 179/1eA
	10.5 / 9.99	ftlb/in²	
Charpy Notched Impact Strength, -30°C	15 / 15	kJ/m²	ISO 179/1eA
	7.14 / 7.14	ftlb/in²	
THERMAL PROPERTIES			
Melting Temperature, 10°C/min	175 / *	°C	ISO 11357-1/-3



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RILSAMID® AZM 50 BLACK T6LD

Thermal Decomposition TGA, in air	224	°C	1% wt. loss
	435	°F	
Thermal Decomposition TGA, in nitrogen	224	°C	1% wt. loss
	436	°F	
OTHER PROPERTIES			
Density	1470 / -	kg/m³	ISO 1183
	1.47 / -	g/cm³	

PACKAGING:

This grade is delivered dried in sealed packaging (25 kg bags) ready to be processed

SHELF LIFE:

Two years from the delivery.

For any use above this limit please refer to our technical services.

Processing conditions:

- Typical melt temperature (Min / Recommended / Max) : 250°C / 265°C / 280°C.
- Typical mold temperature : 40 90°C.
- Drying time and temperature (only necessary for bags opened for more than two hours) : 4-8 hours at 80-90°C.

PROCESSING	Headquarters:		
Injection Molding	Arkema France 420 rue d'Estienne d'Orves		
DELIVERY FORM	92705 Colombes Cedex France T +33 (0)1 49 00 80 80		
Granules	hpp.arkema.com		
ADDITIVES	Arkema Inc. – High Performance Polymers		
Release agent	900 First Avenue		
SPECIAL CHARACTERISTICS	King of Prussia, PA 19406 Tel.: +1 610 205 7000		
Heat Stabilized, Light Stabilized	hpp.arkema.com		
REGIONAL AVAILABILITY			
North America, Europe, Asia Pacific, South and Central America			

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