

RILSAMID®

AZM 23 BLACK T6LD

ISO 16396 - PA12, GF23, M1GHLR, 16-060

Rilsamid® AZM 23 BLACK T6LD resin is a fiberglass reinforced polyamide.
This black colored grade is designed for injection moulding.

PROPERTIES	DRY / COND	UNIT	TEST STANDARD
RHEOLOGICAL PROPERTIES			
Melt Volume-Flow Rate	13 / *	cm ³ /10min	ISO 1133
Temperature	235 / *	°C	-
	455 / *	°F	-
Load	5 / *	kg	-
	11 / *	lb	-
MECHANICAL PROPERTIES			
Tensile Modulus	5500 / 5070	MPa	ISO 527-1/-2
	798000 / 735000	psi	
Yield stress	101 / 105	MPa	ISO 527-1/-2
	14600 / 15200	psi	
Yield strain	3 / 3.5	%	ISO 527-1/-2
Nominal Strain at Break	5 / 5.2	%	ISO 527-1/-2
Stress at Break	95 / 100	MPa	ISO 527-1/-2
	13800 / 14500	psi	
Charpy Impact Strength, +23°C	66 / 77	kJ/m ²	ISO 179/1eU
	31.4 / 36.6	ftlb/in ²	
Charpy Impact Strength, -30°C	66 / 83	kJ/m ²	ISO 179/1eU
	31.4 / 39.5	ftlb/in ²	
Charpy Notched Impact Strength, +23°C	15 / 19	kJ/m ²	ISO 179/1eA
	7.14 / 9.04	ftlb/in ²	
Charpy Notched Impact Strength, -30°C	8 / 12	kJ/m ²	ISO 179/1eA
	3.81 / 5.71	ftlb/in ²	
THERMAL PROPERTIES			
Melting Temperature, 10°C/min	179 / *	°C	ISO 11357-1/-3
Temp. of Deflection Under Load, 1.80 MPa	165 / *	°C	ISO 75-1/-2
	329 / *	°F	
Temp. of Deflection Under Load, 0.45 MPa	173 / *	°C	ISO 75-1/-2
	343 / *	°F	

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Vicat Softening Temperature, 50°C/h 50N	165 / *	°C	ISO 306
	329 / *	°F	
Coeff. of Linear Thermal Expansion, parallel	60 / *	E-6/K	ISO 11359-1/-2
Thermal Decomposition TGA, in air	222	°C	1% wt. loss
	432	°F	
Thermal Decomposition TGA, in nitrogen	223	°C	1% wt. loss
	433	°F	
ELECTRICAL PROPERTIES			
Relative Permittivity, 100Hz	5 / -	-	IEC 60250
Relative Permittivity, 1MHz	5 / -	-	IEC 60250
Dissipation Factor, 100Hz	1170 / -	E-4	IEC 60250
Dissipation Factor, 1MHz	364 / -	E-4	IEC 60250
OTHER PROPERTIES			
Water Absorption	1.3 / *	%	Sim. to ISO 62
Humidity Absorption	0.5 / *	%	Sim. to ISO 62
Density	1180 / 1170	kg/m ³	ISO 1183
	1.18 / 1.17	g/cm ³	

PACKAGING:&NBSP;

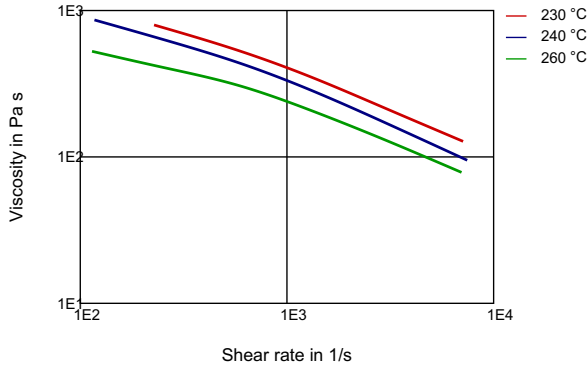
This grade is delivered dried in sealed packaging (25 kg bags / 450 kg rigid containers) ready to be processed

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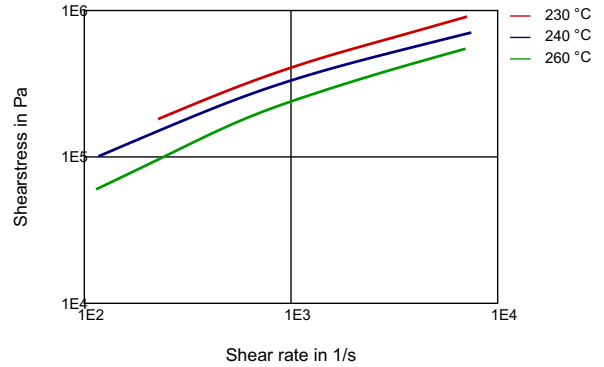
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DIAGRAMS

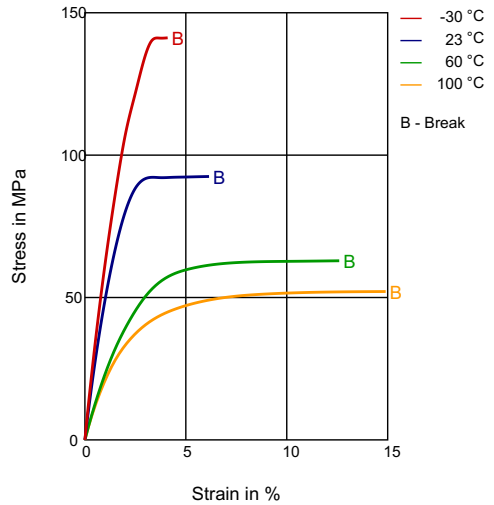
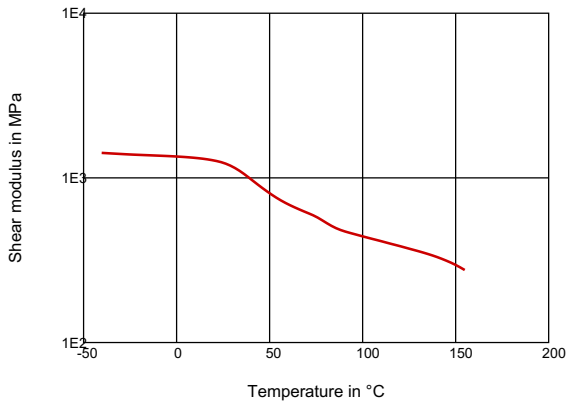
VISCOSITY-SHEAR RATE



SHEARSTRESS-SHEAR RATE



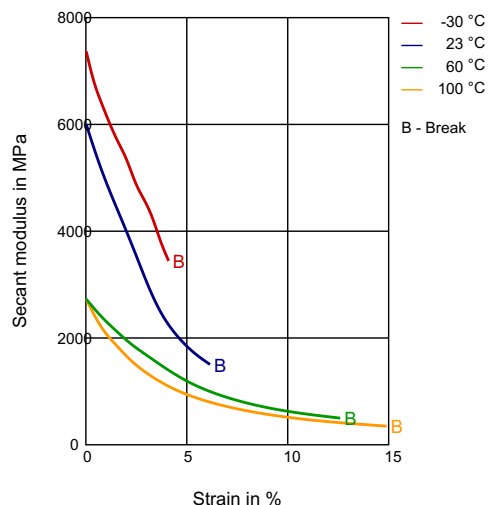
DYNAMIC SHEAR MODULUS-TEMPERATURE & STRESS-STRAIN



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SECANT MODULUS-STRAIN



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.

<p>PROCESSING</p> <p>Injection Molding</p>	
<p>DELIVERY FORM</p> <p>Pellets</p>	
<p>ADDITIVES</p> <p>Release agent</p>	
<p>SPECIAL CHARACTERISTICS</p> <p>Heat Stabilized, Light Stabilized</p>	
<p>REGIONAL AVAILABILITY</p> <p>North America, Europe, Asia Pacific, South and Central America, Near East/Africa</p>	