ORGALLOY® RS 6630 BLACK

Orgalloy® RS 6630 BLACK resin is a fiberglass reinforced polyamide 66 alloy designed for injection molding. This black grade offers an outstanding dimensional stability, chemical resistance to automotive fluids and is ideal for the realization of complex parts.

MAIN CHARACTERISTICS

PROPERTIES	DRY / COND	UNIT	TEST STANDARD
RHEOLOGICAL PROPERTIES			
Melt Volume-Flow Rate	7 / *	cm^3/10min	ISO 1133
Temperature	275 / *	°C	-
Load	2.16 / *	kg	-
Molding Shrinkage, parallel	0.3 / *	%	ISO 294-4, 2577
Molding Shrinkage, normal	0.7 / *	%	ISO 294-4, 2577
MECHANICAL PROPERTIES			
Tensile Modulus	8900 / 8500	MPa	ISO 527-1/-2
Stress at Break	130 / 125	MPa	ISO 527-1/-2
Strain at Break	3 / 3	%	ISO 527-1/-2
Shore D Hardness, 15s	79 / *	-	ISO 7619-1
Tensile Creep Modulus, 1h	* / 7900	MPa	ISO 899-1
Tensile Creep Modulus, 1000h	* / 5620	MPa	ISO 899-1
Charpy Impact Strength, +23°C	- / No Break	kJ/m^2	ISO 179/1eU
Charpy Notched Impact Strength, +23°C	10 / 11	kJ/m^2	ISO 179/1eA
THERMAL PROPERTIES			
Melting Temperature, 10°C/min	255 / *	°C	ISO 11357-1/-3
Temp. of Deflection Under Load, 1.80 MPa	225 / *	°C	ISO 75-1/-2
Temp. of Deflection Under Load, 0.45 MPa	245 / *	°C	ISO 75-1/-2
Vicat Softening Temperature, 50°C/h 50N	195 / *	°C	ISO 306
Coeff. of Linear Thermal Expansion, parallel	18 / *	E-6/K	ISO 11359-1/-2
Coeff. of Linear Thermal Expansion, normal	110 / *	E-6/K	ISO 11359-1/-2
Burning Behav. at 1.5 mm Nominal Thickness	HB / *	class	IEC 60695-11-10
Thickness Tested	1.6 / *	mm	-
Burning Behav. at Thickness h	HB / *	class	IEC 60695-11-10
Thickness Tested	3.2 / *	mm	-
ELECTRICAL PROPERTIES			
Relative Permittivity, 100Hz	- / 3	-	IEC 60250
Relative Permittivity, 1MHz	- / 4	-	IEC 60250
Dissipation Factor, 100Hz	- / 290	E-4	IEC 60250
Dissipation Factor, 1MHz	- / 160	E-4	IEC 60250
Volume Resistivity	- / >1E13	Ohm*m	IEC 60093

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Surface Resistivity	* / >1E15	Ohm	IEC 60093
Dielectric (Electric) Strength	34 / 34	kV/mm	IEC 60243-1
Comparative Tracking Index	* / 600	-	IEC 60112
OTHER PROPERTIES			
Water Absorption	1.9 / *	%	Sim. to ISO 62
Humidity Absorption	0.9 / *	%	Sim. to ISO 62
Density	1270 / 1270	kg/m³	ISO 1183

MAIN APPLICATIONS:

- Electric connectors
- Sport parts
- Automotive fan shrouds

PACKAGING:

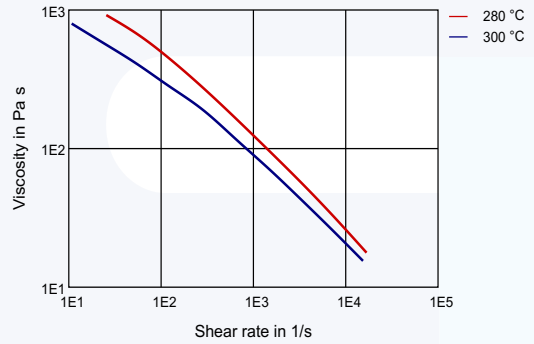
This grade is delivered dried in sealed packaging (25kg bags) ready to be processed.

SHELF LIFE:

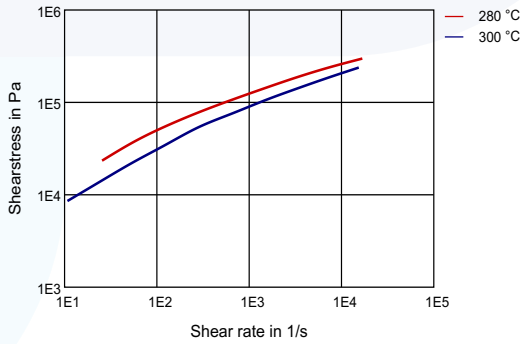
Two years from the date of delivery. For any use above this limit, please refer to our technical services.

DIAGRAMS

VISCOSITY-SHEAR RATE



SHEARSTRESS-SHEAR RATE



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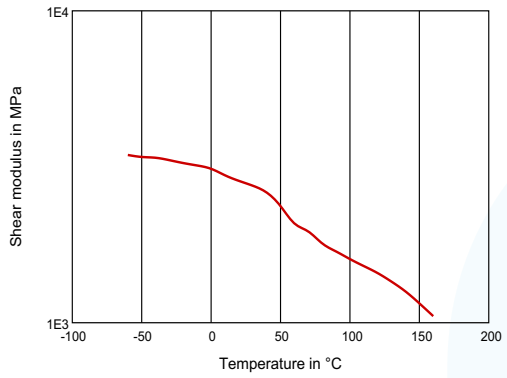
DYNAMIC SHEAR MODULUS-TEMPERATURE



Processing conditions:

- Drying time (only necessary for bags opened for more than two hours): 4-8 hours at 80°C
- Injection temperature (min-recommended-max): 270-280-290°C
- Mould temperature (min-max): 60-80°C

PROCESSING

Injection Molding

SPECIAL CHARACTERISTICS

Heat Stabilized, Light Stabilized

DELIVERY FORM

Pellets

REGIONAL AVAILABILITY

North America, Europe, Asia Pacific, South and Central America, Near East/Africa

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ORGALLOY® BY ARKEMA

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