

RADISTRONG AROMA RV500RKC2 306 BK

DESCRIPTION

Special PA 50% glass fibre reinforced, high flow injection moulding grade. Heat stabilized. Drinking water and food contact. Black colour.

General purpose metal replacement product with good resistance to hydrolysis, enhanced mechanical properties after moisture pick-up. Specifically intended for use in applications in civil and industrial water management as well as appliances and consumer goods. Suitable for parts requiring very high stiffness and high mechanical resistance along with high surface quality and superior gloss.

ISO 16396: PA66+PA 6I/X,GF50,M1H,S10-190

ISO 1043: (PA66+PA*)-GF50

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

MATERIAL HANDLING AND PROCESSING

The material is delivered in moisture-proof packaging ready for processing. Maximum recommended water content for best processing is 0.15%. Typical conditions with a desiccant drier: temperature 80 ° C, dew point -20 ° C or below, time 2-4 h or more. Special care must be taken to avoid moisture absorption and contamination with other polymers when adding regrind material. Colour variation and mechanical properties reduction may occur and should always be carefully monitored.

Injection Molding Processing Parameters

Melt Temperature
280 - 300°C

Mold Temperature
80 - 100°C

Injection Speed
medium-high

PRODUCT SAFETY AND APPROVALS

For safety instruction please refer to Safety Data Sheet

ROHS compliant 2011/65/EU and successive amendments

Suitable for materials and articles intended to come into contact directly or indirectly with food in compliance with EU 10/2011 and FDA Title 21CFR Chapter 1, part 177.1500. Suitable for drinking water contact.

Suitable and approved for drinking water contact.

Please get in contact with our Customer Service for drinking water contact approvals and further information.



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PROPERTY	STANDARD	UNIT	VALUE		
			DAM*	Cond**	
PHYSICAL PROPERTIES					
Density	ISO 1183	kg/m ³	1580		
Moulding shrinkage - Parallel / Normal	290/80/60 ^[1]	ISO 294-4	%	0.2 / 0.6	
Water Absorption, immersion at 23°C	2mm	ISO 62	%	3.8	
Moisture Absorption 23°C - 50%RH	2mm	ISO 62	%	1.1	
MECHANICAL PROPERTIES					
Tensile Modulus	1mm/min	ISO 527-2/1A	MPa	17400	16300
Stress at Break	5mm/min	ISO 527-2/1A	MPa	230	190
Strain at Break	5mm/min	ISO 527-2/1A	%	2.3	2.8
Flexural Modulus	2mm/min	ISO 178	MPa	15900	15300
Flexural Strength	2mm/min	ISO 178	MPa	355	290
Charpy Impact Strength	+23°C	ISO 179/1eU	kJ/m ²	95	95
Charpy Notched Impact Strength	+23°C	ISO 179/1eA	kJ/m ²	15	15
THERMAL PROPERTIES					
Melting Temperature	10°C/min	ISO 11357-1/-3	°C	260	

*: DAM = Dry As Moulded state according to ISO 16396-2, **: Cond = Conditioned state similar to ISO 1110

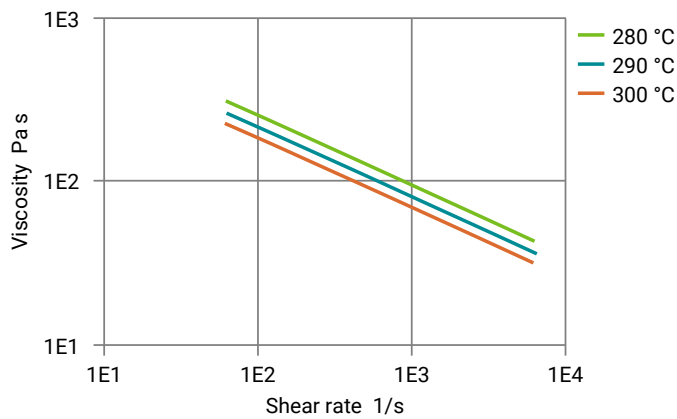
1: Melt Temperature [°C] / Mold Temperature [°C] / Cavity Pressure [MPa]



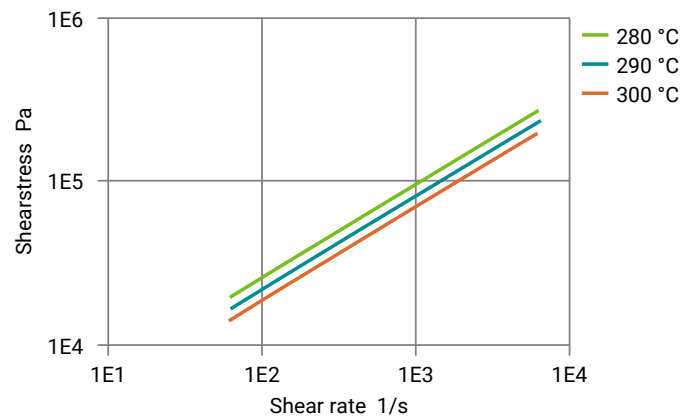
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DIAGRAMS

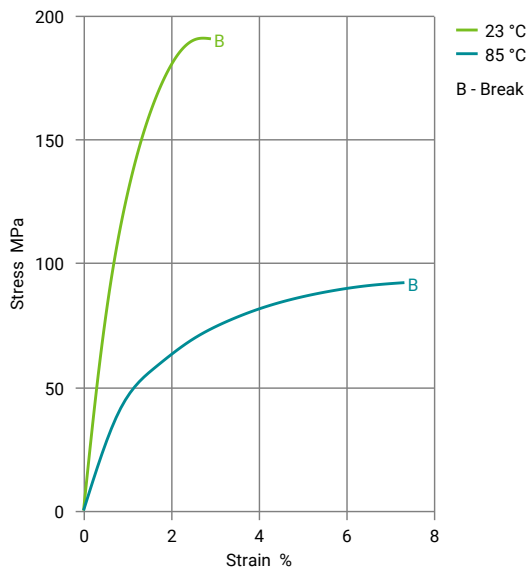
Viscosity-shear rate



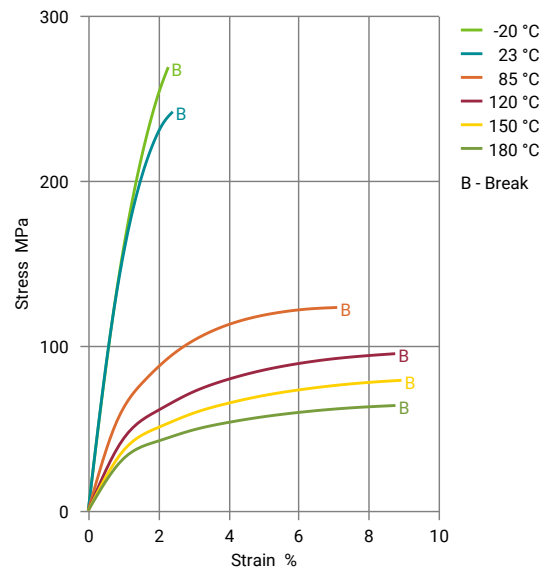
Shearstress-shear rate



Stress-strain (cond.)

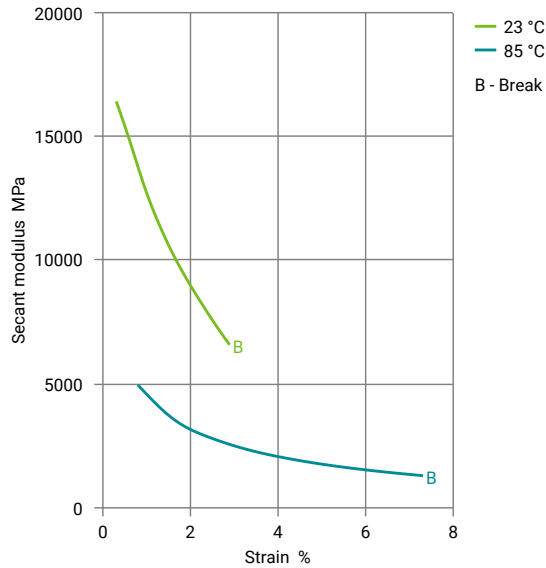


Stress-strain (dry)

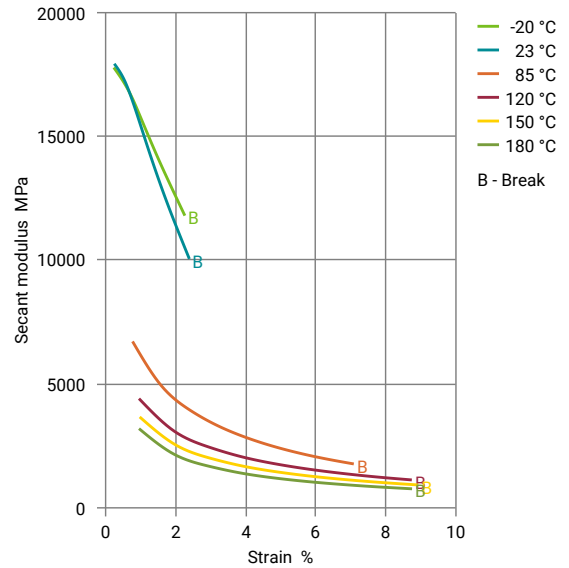


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Secant modulus-strain (cond.)



Secant modulus-strain (dry)



Specific volume-temperature (pvT)

