

PRODUCT INFORMATION

RADILON S CV300 100 NT

DESCRIPTION

PA6 30% glass beads filled injection moulding grade. Natural colour.

Suitable for parts requiring good dimensional stability, reduced shrinkage and low warpage. It provides a good surface finish to moulded parts.

ISO 1043: PA6 GB30

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
240 - 280°C

Mold Temperature
80 - 90°C

Injection Speed
medium-high

PRODUCT SAFETY AND APPROVALS

For safety instruction please refer to Material Safety Data Sheet
ROHS compliant 2011/65/UE and following amendments

TECHNICAL DATA SHEET

RADILON S CV300 100 NT

PROPERTY	STANDARD	UNIT	VALUE	
			DAM*	Cond**
PHYSICAL PROPERTIES				
Density		kg/m ³	1340	
Moulding shrinkage - Parallel / Normal	280 /80 /60 ^[1]	%	1.1 / 1.1	
Water Absorption, immersion at 23°C	2mm	%	8	
Moisture Absorption 23°C - 50%RH	2mm	%	2.2	
MECHANICAL PROPERTIES				
Tensile Modulus	1mm/min	ISO 527-2/1A	MPa	3900 2400
Stress at Yield	50mm/min	ISO 527-2/1A	MPa	65 35
Yield Strain		ISO 527-2/1A	%	3 10
Nominal Strain at Break	50mm/min	ISO 527-2/1A	%	12 50
Flexural Modulus	2mm/min	ISO 178	MPa	3700
Flexural Strength	2mm/min	ISO 178	MPa	115
Charpy Impact Strength	+23°C	ISO 179/1eU	kJ/m ²	35 40
Charpy Impact Strength	-30°C	ISO 179/1eU	kJ/m ²	30
Charpy Notched Impact Strength	+23°C	ISO 179/1eA	kJ/m ²	4 5.5
Charpy Notched Impact Strength	-30°C	ISO 179/1eA	kJ/m ²	3.5
THERMAL PROPERTIES				
Melting Temperature	10°C/min	ISO 11357-1/-3	°C	220
Heat Deflection Temperature	1.80 MPa	ISO 75/2Af	°C	70
Heat Deflection Temperature	0.45 MPa	ISO 75/2Bf	°C	170
Vicat Softening Temperature	50°C/h 50N	ISO 306	°C	200
FLAMMABILITY PROPERTIES				
Flammability	0.8mm	UL 94	class	HB
Glow Wire Flammability Index	2mm	IEC 60695-2-1/2	°C	700
Automotive Interior Flammability	3mm	ISO 3795	mm/min	0
ELECTRICAL PROPERTIES				
Volume Resistivity	500V	IEC 60093	Ohm*m	1E13 1E11
Surface Resistivity	500V	IEC 60093	Ohm	1E12 1E10
Comparative Tracking Index	Sol.A	IEC 60112	-	450

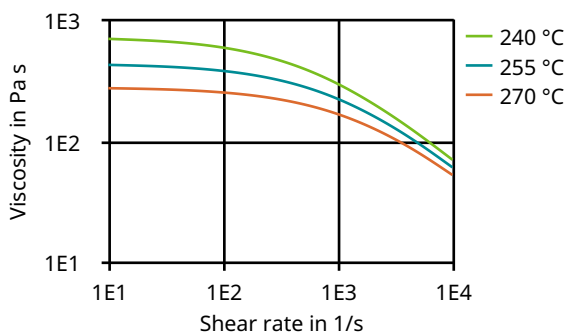
*: DAM = Dry As Moulded state according to ISO 16396-2 **: Cond = Conditioned state similar to ISO 1110 1: Melt Temperature [°C] / Mold Temperature [°C] / Cavity Pressure [MPa]

TECHNICAL DATA SHEET

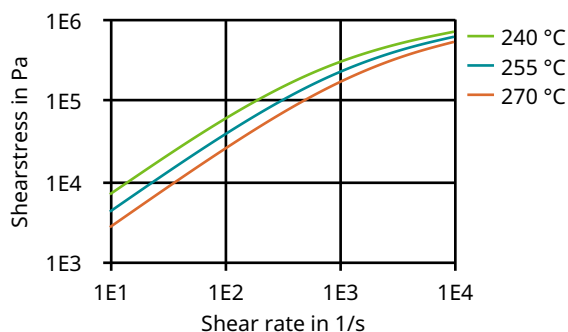
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Diagrams

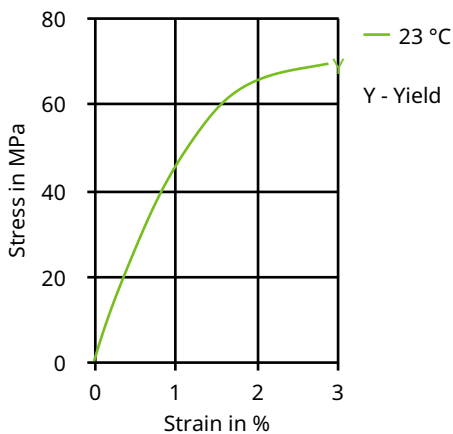
Viscosity-shear rate



Shearstress-shear rate



Stress-strain (dry)



Stress-strain (cond.)

