

PRODUCT INFORMATION

RADILON A 42K 100 M NT

DESCRIPTION

PA66 high viscosity extrusion grade. Heat stabilized. Natural colour.

Suitable for extrusion of tubes, profiles, bars, rods and sheets. Also suitable for injection moulding of high thickness items.

ISO 1043: PA66-T

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
70 - 90°C

Injection Speed
medium

Extrusion Temperature
270 - 290°C

PRODUCT SAFETY AND APPROVALS

For safety instruction please refer to Material Safety Data Sheet

Underwriters Laboratories Inc. certified material. File number: E116324 www.ul.com

ROHS compliant 2011/65/UE and following amendments

TECHNICAL DATA SHEET

RADILON A 42K 100 M NT

PROPERTY	STANDARD	UNIT	VALUE	
			DAM*	Cond**
PHYSICAL PROPERTIES				
Density		kg/m ³	1140	
Moulding shrinkage - Parallel / Normal	290 / 60 / 60 ^[1]	%	1.1 / 1.3	
Water Absorption, immersion at 23°C	2mm	%	8.4	
Moisture Absorption 23°C - 50%RH	2mm	%	2.1	
Viscosity Index (Sulfuric Acid)	ISO 307	ml/g	260	
MECHANICAL PROPERTIES				
Tensile Modulus	1mm/min	MPa	3200	1600
Stress at Yield	50mm/min	MPa	85	60
Yield Strain		%	4.5	25
Nominal Strain at Break	50mm/min	%	45	>50
Flexural Modulus	2mm/min	MPa	2900	
Flexural Strength	2mm/min	MPa	110	
Charpy Notched Impact Strength	+23°C	kJ/m ²	6	20
Charpy Notched Impact Strength	-30°C	kJ/m ²	5	
THERMAL PROPERTIES				
Melting Temperature	10°C/min	ISO 11357-1/-3	°C	260
Heat Deflection Temperature	1.80 MPa	ISO 75/2Af	°C	75
Heat Deflection Temperature	0.45 MPa	ISO 75/2Bf	°C	195
Vicat Softening Temperature	50°C/h 50N	ISO 306	°C	240
FLAMMABILITY PROPERTIES				
Flammability	0.8mm	UL 94	class	HB
Glow Wire Flammability Index	2mm	IEC 60695-2-1/2	°C	750
Automotive Interior Flammability	3mm	ISO 3795	mm/min	0
ELECTRICAL PROPERTIES				
Volume Resistivity	500V	IEC 60093	Ohm*m	1E13
Surface Resistivity	500V	IEC 60093	Ohm	1E12

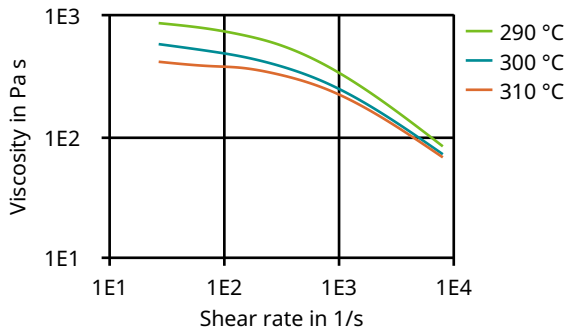
*: DAM = Dry As Moulded state according to ISO 16396-2 **: Cond = Conditioned state similar to ISO 1110 1: Melt Temperature [°C] / Mold Temperature [°C] / Cavity Pressure [MPa]

TECHNICAL DATA SHEET

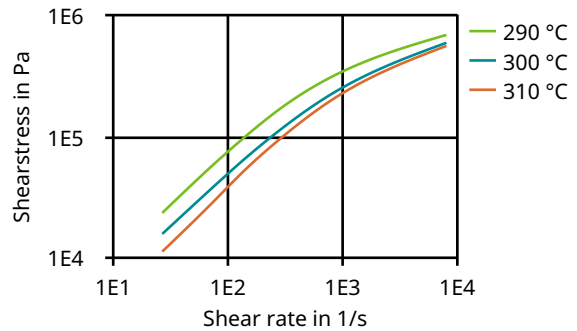
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Diagrams

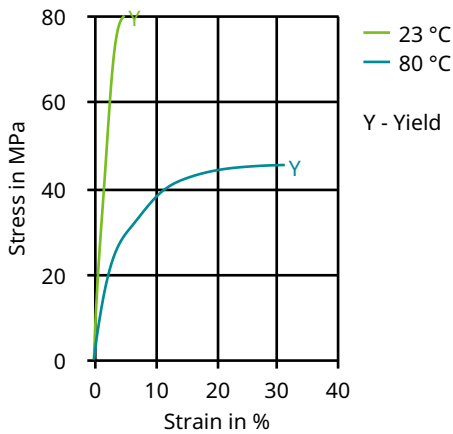
Viscosity-shear rate



Shearstress-shear rate



Stress-strain (dry)



Stress-strain (cond.)

