



RADILON D 40P50K 100 NT

DESCRIPTION

PA610 flexible, high viscosity extrusion grade. Plasticized. Heat stabilized. Natural colour.

Suitable for extrusion of tubes and profiles. Typical application: air pressure pipes. This grade is partially renewably-sourced (64% of base polymer by weight).

ISO 1043: PA610-P

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 0.10%. 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

230 - 260°C

Extrusion Temperature

240 - 290°C

Mold Temperature

70 - 80°C

Injection Speed

medium

PRODUCT SAFETY AND APPROVALS

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



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PROPERTY	STANDARD	UNIT	VALUE	
			DAM*	Cond**
PHYSICAL PROPERTIES				
Density	ISO 1183	kg/m ³	1100	
Water Absorption, immersion at 23°C	ISO 62	%		2.5
Moisture Absorption 23°C - 50%RH	ISO 62	%		1.1
MECHANICAL PROPERTIES				
Tensile Modulus	ISO 527-2/1A	MPa	750	530
Stress at Yield	ISO 527-2/1A	MPa	40	30
Yield Strain	ISO 527-2/1A	%	55	
Nominal Strain at Break	ISO 527-2/1A	%	>100	>300
Flexural Modulus	ISO 178	MPa	620	
Flexural Strength	ISO 178	MPa	25	
Charpy Notched Impact Strength	ISO 179/1eA	kJ/m ²	25	35
Charpy Notched Impact Strength	ISO 179/1eA	kJ/m ²	6	
THERMAL PROPERTIES				
Melting Temperature	ISO 11357-1/-3	°C		215
Heat Deflection Temperature	ISO 75/2Af	°C		50
Coeff. of Linear Therm. Expansion	ISO 11359-1/-2	E-6/K		136
Coeff. of Linear Therm. Expansion	ISO 11359-1/-2	E-6/K		130
ELECTRICAL PROPERTIES				
Volume Resistivity	IEC 62631-3-1	Ohm*m	1E13	1E11
Surface Resistivity	IEC 62631-3-2	Ohm	1E12	1E10

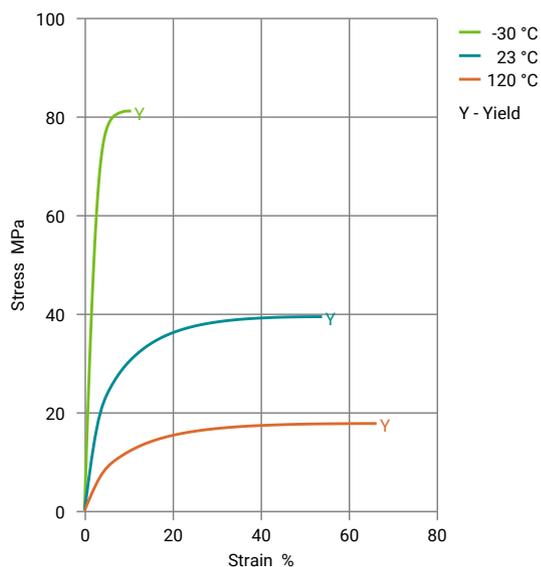
*: DAM = Dry As Moulded state according to ISO 16396-2, **: Cond = Conditioned state similar to ISO 1110



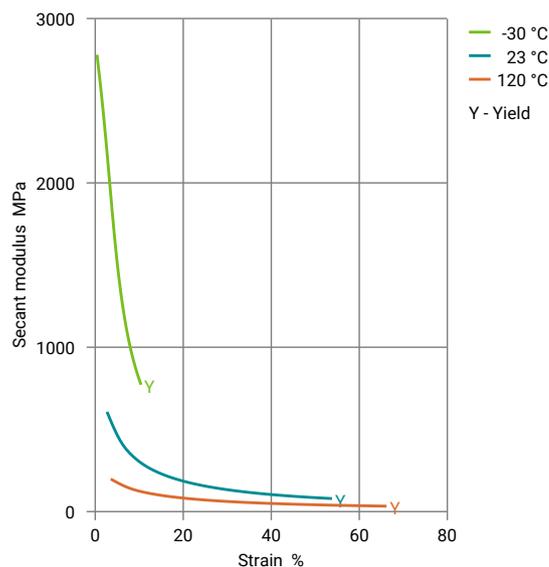
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DIAGRAMS

Stress-strain (dry)



Secant modulus-strain (dry)



Thermal expansion

