

PRODUCT INFORMATION

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 (60% 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

Mold Temperature

70 - 80°C

Injection Speed

medium

Extrusion Temperature

240 - 290°C

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 D 40P50K 100 NT

PROPERTY		STANDARD	UNIT	VALUE	
				DAM*	Cond**
PHYSICAL PROPERTIES					
Density		ISO 1183	kg/m ³	1090	
Water Absorption, immersion at 23°C	2mm	ISO 62	%	2.5	
Moisture Absorption 23°C - 50%RH	2mm	ISO 62	%	1.1	
MECHANICAL PROPERTIES					
Tensile Modulus	1mm/min	ISO 527-2/1A	MPa	800	530
Stress at Yield	50mm/min	ISO 527-2/1A	MPa	40	30
Yield Strain		ISO 527-2/1A	%	55	
Nominal Strain at Break	50mm/min	ISO 527-2/1A	%	>300	>100
Stress at Break	50mm/min	ISO 527-2/1A	MPa	54	
Flexural Modulus	2mm/min	ISO 178	MPa	650	
Flexural Strength	2mm/min	ISO 178	MPa	27	
Charpy Notched Impact Strength	+23°C	ISO 179/1eA	kJ/m ²	20	35
Charpy Notched Impact Strength	-30°C	ISO 179/1eA	kJ/m ²	6	
THERMAL PROPERTIES					
Melting Temperature	10°C/min	ISO 11357-1/-3	°C	215	
Heat Deflection Temperature	1.80 MPa	ISO 75/2Af	°C	50	
Coeff. of Linear Therm. Expansion	parallel, 23°C-55°C	ISO 11359-1/-2	E-6/K	136	
Coeff. of Linear Therm. Expansion	normal, 23°C-55°C	ISO 11359-1/-2	E-6/K	129	
ELECTRICAL PROPERTIES					
Volume Resistivity	500V	IEC 60093	Ohm*m	1E13	
Surface Resistivity	500V	IEC 60093	Ohm	1E12	

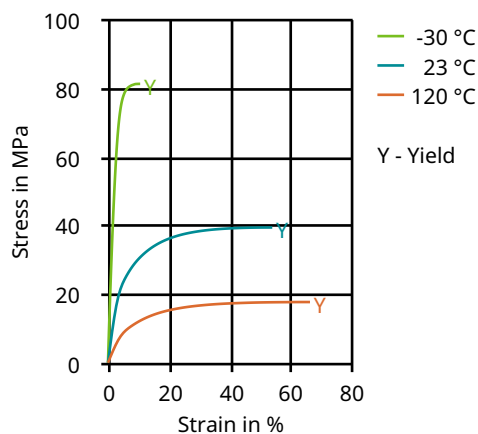
*: DAM = Dry As Moulded state according to ISO 16396-2 **: Cond = Conditioned state similar to ISO 1110

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Diagrams

Stress-strain (dry)



Secant modulus-strain (dry)

