

RADILON D HS 105 M NAT 5522

Material code

Colour code

PROVISIONAL

DESCRIPTION

PA610 injection moulding grade. Nucleated and lubricated, fast cycling. Natural colour.

General purpose grade, suitable for parts requiring high productivity.
This grade is partially renewably-sourced (60% of base polymer by weight).

ISO 1043 : PA610

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.

Processing Parameters

Melt Temperature:	Mold Temperature:	Injection Speed:
230 ÷ 260 °C	70 ÷ 80 °C	Medium

PRODUCT SAFETY AND APPROVALS

For safety instruction please refer to Material Safety Data Sheet

RoHS compliant 2002/95/CE and following amendments

Technical data sheet

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PROPERTY		STANDARD	UNIT	VALUE	
				DAM*	Cond**
Physical Properties					
Density		ISO 1183	Kg/m ³	1080	
Moisture absorption 23°C – 50%RH	2mm thk	ISO 62	%	1.4	
Water absorption, immersion at 23°C	2mm thk	ISO 62	%	3.2	
Mechanical Properties					
Tensile Modulus	1mm/min	ISO 527-2/1A	MPa	2500	1300
Stress at Yield	50mm/min	ISO 527-2/1A	MPa	68	50
Yield Strain	50mm/min	ISO 527-2/1A	%	4.4	15
Nominal Strain at Break	50mm/min	ISO 527-2/1A	%	45	>100
Flexural Modulus	2mm/min	ISO 178	MPa	2300	
Flexural Strength	2mm/min	ISO 178	MPa	90	
Charpy Impact Strength	+23°C	ISO 179/1 eU	KJ/m ²		NB
Charpy Notched Impact Strength	+23°C	ISO 179/1 eA	KJ/m ²	5	9
Charpy Notched Impact Strength	-30°C	ISO 179/1 eA	KJ/m ²	4	
Thermal Properties					
Melting Temperature	10°C/min	ISO 11357-1-3	°C	217	
Heat Deflection Temperature	1.8 MPa	ISO 75/2 A f	°C	55	
Vicat Softening Temperature	50°C/h	ISO 306/B50 50N	°C	185	
Flammability Properties					
Flammability	0.8mm	UL 94	class	V2	
Glow Wire Flammability Index	2mm	IEC 60695-2-1/2	°C/mm	750	

*DAM = Dry As Moulded state **Cond = Conditioned state similar to ISO 1110 ***Melt Temp [°C] / Mold Temp [°C] / Cavity press [MPa]

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