



RADILON TL 1000 NT

PROVISIONAL

DESCRIPTION

Microcrystalline PA MACM.12 injection moulding grade with good flowability. Transparent, natural colour.

Suitable for parts requiring good dimensional stability and low warpage. Extreme light transparency and good surface aspect.

ISO 1043: PA MACM.12

REGIONAL AVAILABILITY: North America, Europe, Asia Pacific, South and Central America, Near East/Africa

THE CHARACTERISTICS SHOWN HERE ARE PROVISIONAL AND REFLECT THE AVERAGE VALUES OF PROPERTIES MEASURED OVER A LIMITED NUMBER OF PRODUCTION CAMPAIGNS

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
250 - 280°C

Mold Temperature
60 - 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			1020	
Moulding shrinkage - Parallel / Normal	260/70/60 ^[1]	ISO 1183 ISO 294-4	kg/m ³ %	0.8 / 0.8
Water Absorption, immersion at 23°C	2mm	ISO 62	%	1.8
MECHANICAL PROPERTIES				
Tensile Modulus	1mm/min	ISO 527-2/1A	MPa	1500
Stress at Yield	50mm/min	ISO 527-2/1A	MPa	60
Yield Strain	50mm/min	ISO 527-2/1A	%	8
Nominal Strain at Break	50mm/min	ISO 527-2/1A	%	>120
Flexural Modulus	2mm/min	ISO 178	MPa	1400
Flexural Strength	2mm/min	ISO 178	MPa	80
Charpy Impact Strength	+23°C	ISO 179/1eU	kJ/m ²	N
Charpy Impact Strength	-30°C	ISO 179/1eU	kJ/m ²	N
Charpy Notched Impact Strength	+23°C	ISO 179/1eA	kJ/m ²	9
Charpy Notched Impact Strength	-30°C	ISO 179/1eA	kJ/m ²	7
THERMAL PROPERTIES				
Melting Temperature	10°C/min	ISO 11357-1/-3	°C	155 ^[2]
Glass Transition Temperature	10°C/min	ISO 11357-1/-2	°C	130
Heat Deflection Temperature	0.45 MPa	ISO 75/2Bf	°C	125
FLAMMABILITY PROPERTIES				
Glow Wire Flammability Index	1mm	IEC 60695-2-12	°C	960
Glow Wire Flammability Index	2mm	IEC 60695-2-12	°C	960
Glow Wire Ignition Temperature	1mm	IEC 60695-2-13	°C	775
Glow Wire Ignition Temperature	2mm	IEC 60695-2-13	°C	770
ELECTRICAL PROPERTIES				
Volume Resistivity	500V	IEC 62631-3-1	Ohm*m	1E13
Surface Resistivity	500V	IEC 62631-3-2	Ohm	1E12
Comparative Tracking Index	Sol.A	IEC 60112	V	600

*: 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]

2: Tm ranging from 155°C to 225°C

