



RADILON NeXTreme HSW 100 NT

PROVISIONAL

DESCRIPTION

PA injection moulding and extrusion grade. Heat stabilized. Natural colour.

Suitable for monofilament extrusion and production of injection moulded technical items. Good properties retention upon long term stay at high temperatures

ISO 1043: PA*

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

Formerly Known As RADILON AESTUS T3 HSW 100 NT

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 120° C, dew point -20 ° C or below, time 4 h or more. Avoid excessive shear rates and high thermal stresses for better processing. 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
300 - 330°C

Mold Temperature
90 - 120°C

Injection Speed
high

Extrusion Temperature
300 - 320°C

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	1170	
Water Absorption, 24h immersion at 23°C	2mm	ISO 62	%		0.5
MECHANICAL PROPERTIES					
Tensile Modulus	1mm/min	ISO 527-2/1A	MPa	3500	
Stress at Break	5mm/min	ISO 527-2/1A	MPa	80	
Strain at Break	5mm/min	ISO 527-2/1A	%	2.8	
Flexural Modulus	2mm/min	ISO 178	MPa	3200	
Flexural Strength	2mm/min	ISO 178	MPa	130	
Charpy Impact Strength	+23°C	ISO 179/1eU	kJ/m ²	35	
Charpy Notched Impact Strength	+23°C	ISO 179/1eA	kJ/m ²	4	
Charpy Notched Impact Strength	-30°C	ISO 179/1eA	kJ/m ²	3	
THERMAL PROPERTIES					
Melting Temperature	10°C/min	ISO 11357-1/-3	°C	302	
Heat Deflection Temperature	1.80 MPa	ISO 75/2Af	°C	85	
FLAMMABILITY PROPERTIES					
Flammability	0.8mm	UL 94	class		HB
ELECTRICAL PROPERTIES					
Volume Resistivity	500V	IEC 62631-3-1	Ohm*m	1E13	1E11
Surface Resistivity	500V	IEC 62631-3-2	Ohm	1E12	1E10

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

