

Radilon® NeXTreme HSW 100 HT

Radici Group High Performance Polymers - *Polyamide*

General Information

Product 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.

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Additive	• Heat Stabilizer		
Features	• Heat Stabilized		
Uses	• Monofilaments		
Agency Ratings	• EU 2011/65/EC		
RoHS Compliance	• RoHS Compliant		
Appearance	• Natural Color		
Processing Method	• Extrusion	• Injection Molding	
Resin ID (ISO 1043)	• PA		

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	1.17	g/cm ³	ISO 1183
Water Absorption (24 hr, 73°F, 0.0787 in)	0.50	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	522000	psi	ISO 527-1/1A/1
Tensile Stress (Break)	12800	psi	ISO 527-2/1A/5
Tensile Strain (Break)	3.0	%	ISO 527-2/1A/5
Flexural Modulus ²	457000	psi	ISO 178
Flexural Stress ²	18900	psi	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength			ISO 179/1eA
-22°F	1.2	ft·lb/in ²	
73°F	1.4	ft·lb/in ²	
Charpy Unnotched Impact Strength (73°F)	17	ft·lb/in ²	ISO 179/1eU
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (264 psi, Unannealed)	185	°F	ISO 75-2/Af
Melting Temperature ³	576	°F	ISO 11357-3
Electrical	Nominal Value	Unit	Test Method
Surface Resistivity (500 V)	1.0E+12	ohms	IEC 62631-3-2
Volume Resistivity (500 V)	1.0E+13	ohms·m	IEC 62631-3-1
Flammability	Nominal Value	Unit	Test Method
Flame Rating (0.031 in)	HB		UL 94

Processing Information

Injection	Nominal Value	Unit
Drying Temperature - Desiccant Dryer	248	°F
Drying Time - Desiccant Dryer	> 4.0	hr
Dew Point - Desiccant Dryer	< -4	°F
Suggested Max Moisture	0.10	%



Processing (Melt) Temp	572 to 626 °F
Mold Temperature	194 to 248 °F
Injection Rate	Fast
Extrusion	Nominal Value Unit
Drying Temperature	248 °F
Drying Time	> 4.0 hr
Suggested Max Moisture	0.10 %
Melt Temperature	572 to 608 °F

Notes

- ¹ Typical properties: these are not to be construed as specifications.
- ² 0.079 in/min
- ³ 10°C/min

