Radilon® A USX200K 1700 NT

Radici Group High Performance Polymers - *Polyamide 66*

General Information

Product Description

PA66 Super impact modified, moderately heat stabilized, injection moulding grade, Natural colour.

Suitable for parts requiring excellent impact resistance, even at low temperatures, and high flexibility.

General			
Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Additive	• Heat Stabilizer	• Impact Modifier	
Features	• Heat Stabilized • High Flexibility	• High Impact Resistance • Low Temperature Heat Sealability	
Uses	• Automotive Applications		
Agency Ratings	• EU 2011/65/EC		
RoHS Compliance	• RoHS Compliant		
Automotive Specifications	• STELLANTIS MS-DB-41 CPN3223		
Appearance	• Natural Color		
Processing Method	• Extrusion	• Injection Molding	
Resin ID (ISO 1043)	• PA66-IT		

Properties [1]

Physical	Nominal Value	Unit	Test Method
Density	1.07	g/cm³	ISO 1183
Molding Shrinkage [2]			ISO 294-4
Across Flow	1.7	%	
Flow	1.9	%	
Water Absorption (Saturation, 73°F, 0.0787 in)	7.0	%	ISO 62
Water Absorption (Equilibrium, 73°F, 0.0787 in, 50% RH)	1.8	%	ISO 62
Viscosity Index - Sulfuric Acid	3880	in³/lb	ISO 307
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Modulus	284000	psi	ISO 527-1/1A/1
Tensile Stress (Yield)	7250	psi	ISO 527-2/1A/50
Flexural Modulus [3]	261000	psi	ISO 178
Flexural Stress [3]	10600	psi	ISO 178
Impact	**Nominal Value**	**Unit**	**Test Method**
Charpy Notched Impact Strength			ISO 179/1eA
-22°F	17	ft·lb/in²	
73°F	38	ft·lb/in²	
Notched Izod Impact Strength			ISO 180/1A
-22°F	14	ft·lb/in²	
73°F	35	ft·lb/in²	
Thermal	**Nominal Value**	**Unit**	**Test Method**
Deflection Temperature Under Load (66 psi, Unannealed)	284	°F	ISO 75-2/Bf
Deflection Temperature Under Load (264 psi, Unannealed)	131	°F	ISO 75-2/Af
Vicat Softening Temperature	338	°F	ISO 306/B50
Melting Temperature [4]	500	°F	ISO 11357-3
CLTE - Flow (73 to 131°F)	3.8E-6	in/in/°F	ISO 11359-2

CLTE - Transverse (73 to 131°F)	6.6E-6 in/in/°F	ISO 11359-2

Processing Information

Injection	Nominal Value	Unit
Drying Temperature - Desiccant Dryer	176	°F
Drying Time - Desiccant Dryer	2.0 to 4.0	hr
Dew Point - Desiccant Dryer	< -4	°F
Suggested Max Moisture	0.10	%
Processing (Melt) Temp	527 to 563	°F
Mold Temperature	158 to 194	°F
Injection Rate	Moderate	

Extrusion	Nominal Value	Unit
Melt Temperature	518 to 536	°F

Notes

[1] Typical properties: these are not to be construed as specifications.

[2] 290°C Melt temperature/ 70°C Mold Temperature/ 60 MPa Cavity Pressure

[3] 0.079 in/min

[4] 10°C/min