

Radilon® S USZ200K 339 BK

Radici Group High Performance Polymers - Polyamide 6

General Information

Product Description

PA6 Super impact modified at sub-ambient temperatures, heat stabilized, injection moulding grade, Black colour

Suitable for parts requiring moderate stiffness and excellent low temperature impact resistance such as hydrogen tanks.

General

Additive	<ul style="list-style-type: none"> Heat Stabilizer 	<ul style="list-style-type: none"> Impact Modifier
Features	<ul style="list-style-type: none"> Heat Stabilized Impact Modified 	<ul style="list-style-type: none"> Low Temperature Impact Resistance Medium Stiffness
Uses	<ul style="list-style-type: none"> Tanks 	
Agency Ratings	<ul style="list-style-type: none"> EU 2011/65/EC 	
RoHS Compliance	<ul style="list-style-type: none"> RoHS Compliant 	
Appearance	<ul style="list-style-type: none"> Black 	
Processing Method	<ul style="list-style-type: none"> Injection Molding 	
Resin ID (ISO 1043)	<ul style="list-style-type: none"> PA6-HI 	

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	1.06	g/cm ³	ISO 1183
Molding Shrinkage			ISO 294-4
Across Flow	1.4	%	
Flow	1.5	%	
Water Absorption (Saturation, 73°F, 0.0787 in)	7.9	%	ISO 62
Water Absorption			ISO 62
Equilibrium, 73°F, 0.0787 in, 50% RH	2.0	%	
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	212000	psi	ISO 527-1/1A/1
Tensile Stress (Yield)	5510	psi	ISO 527-2/1A/50
Tensile Strain (Yield)	4.8	%	ISO 527-2/1A/50
Nominal Tensile Strain at Break	> 120	%	ISO 527-2/1A/50
Flexural Modulus ²	207000	psi	ISO 178
Flexural Stress ²	7540	psi	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength			ISO 179/1eA
-40°F	12	ft-lb/in ²	
-22°F	35	ft-lb/in ²	
73°F	52	ft-lb/in ²	
Charpy Unnotched Impact Strength (73°F)	No Break		ISO 179/1eU
Thermal	Nominal Value	Unit	Test Method
Melting Temperature ³	428	°F	ISO 11357-3
CLTE - Flow (73 to 131°F)	6.4E-5	in/in/°F	ISO 11359-2
CLTE - Transverse (73 to 131°F)	1.2E-4	in/in/°F	ISO 11359-2

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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
Burning Rate (0.118 in)	0.0	in/min	ISO 3795

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	482 to 536	°F
Mold Temperature	158 to 176	°F
Injection Rate	Moderate	

Notes

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

² 0.079 in/min

³ 10°C/min