

# Radilon® S BMX200K 333 BK

## Radici Group High Performance Polymers - Polyamide 6

### General Information

#### Product Description

PA6 high viscosity blow moulding grade. Toughened, heat stabilized. Black colour.

Suitable for blow-moulding of tubes and containers; typically used for automotive air ducts.

#### General

Additive	<ul style="list-style-type: none"> <li>Heat Stabilizer</li> </ul>	<ul style="list-style-type: none"> <li>Impact Modifier</li> </ul>	
Features	<ul style="list-style-type: none"> <li>Good Toughness</li> <li>Heat Stabilized</li> </ul>	<ul style="list-style-type: none"> <li>High Viscosity</li> <li>Impact Modified</li> </ul>	
Uses	<ul style="list-style-type: none"> <li>Automotive Applications</li> <li>Blow Molding Applications</li> </ul>	<ul style="list-style-type: none"> <li>Containers</li> <li>Tubing</li> </ul>	
Agency Ratings	<ul style="list-style-type: none"> <li>EU 2011/65/EC</li> </ul>		
RoHS Compliance	<ul style="list-style-type: none"> <li>RoHS Compliant</li> </ul>		
Appearance	<ul style="list-style-type: none"> <li>Black</li> </ul>		
Processing Method	<ul style="list-style-type: none"> <li>Blow Molding</li> </ul>	<ul style="list-style-type: none"> <li>Extrusion</li> </ul>	<ul style="list-style-type: none"> <li>Injection Molding</li> </ul>
Resin ID (ISO 1043)	<ul style="list-style-type: none"> <li>PA6-HI</li> </ul>		

### Properties <sup>1</sup>

Physical	Dry	Conditioned	Unit	Test Method
Density	1.06	--	g/cm <sup>3</sup>	ISO 1183
Melt Mass-Flow Rate (MFR)				ISO 1133
275°C/5.0 kg	2.0	--	g/10 min	
Molding Shrinkage				ISO 294-4
Across Flow	1.1	--	%	
Flow	1.4	--	%	
Water Absorption				ISO 62
Saturation, 73°F, 0.0787 in	5.5	--	%	
Water Absorption				ISO 62
Equilibrium, 73°F, 0.0787 in, 50% RH	1.6	--	%	
Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus	247000	123000	psi	ISO 527-1/1A/1
Tensile Stress (Yield)	6090	5080	psi	ISO 527-2/1A/50
Tensile Strain (Yield)	4.5	--	%	ISO 527-2/1A/50
Nominal Tensile Strain at Break	> 100	> 100	%	ISO 527-2/1A/50
Flexural Modulus <sup>2</sup>	232000	109000	psi	ISO 178
Flexural Stress <sup>2</sup>	8700	5800	psi	ISO 178
Impact	Dry	Conditioned	Unit	Test Method
Charpy Notched Impact Strength				ISO 179/1eA
-22°F	12	--	ft·lb/in <sup>2</sup>	
73°F	50	57	ft·lb/in <sup>2</sup>	
Thermal	Dry	Conditioned	Unit	Test Method
Deflection Temperature Under Load				ISO 75-2/Af
264 psi, Unannealed	131	--	°F	

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Thermal	Dry	Conditioned	Unit	Test Method
Melting Temperature <sup>3</sup>	428	--	°F	ISO 11357-3
Electrical	Dry	Conditioned	Unit	Test Method
Surface Resistivity (500 V)	1.0E+12	1.0E+10	ohms	IEC 62631-3-2
Volume Resistivity (500 V)	1.0E+13	1.0E+11	ohms·m	IEC 62631-3-1
Flammability	Dry	Conditioned	Unit	Test Method
Burning Rate (0.118 in)	< 1.2	--	in/min	ISO 3795
Flame Rating (0.031 in)	HB	--		UL 94

### Processing Information

Injection	Dry 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	0.15 %
Processing (Melt) Temp	482 to 536 °F
Mold Temperature	158 to 176 °F
Injection Rate	Moderate
Extrusion	Dry Unit
Drying Temperature	176 °F
Drying Time	2.0 to 4.0 hr
Suggested Max Moisture	0.15 %
Melt Temperature	482 to 536 °F

#### Notes

<sup>1</sup> Typical properties: these are not to be construed as specifications.

<sup>2</sup> 0.079 in/min

<sup>3</sup> 10°C/min