

# Radilon® S BMV120W 3733 BK

## Radici Group High Performance Polymers - Polyamide 6

### General Information

#### Product Description

PA6 12% glass fibre reinforced, extrusion, blow and injection moulding grade. Heat stabilized. Black colour.

Suitable for blow-moulding of tubes and containers.

#### General

Filler / Reinforcement	• Glass Fiber, 12% Filler by Weight		
Additive	• Heat Stabilizer		
Features	• Heat Stabilized		
Uses	• Automotive Applications	• Containers	• Tubing
Agency Ratings	• EU 2011/65/EC		
RoHS Compliance	• RoHS Compliant		
Appearance	• Black		
Processing Method	• Blow Molding	• Extrusion	• Injection Molding
Resin ID (ISO 1043)	• PA6-T GF12		

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

Physical	Nominal Value	Unit	Test Method
Density	1.22	g/cm <sup>3</sup>	ISO 1183
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	856000	psi	ISO 527-1/1A/1
Tensile Stress (Break)	16000	psi	ISO 527-2/1A/5
Tensile Strain (Break)	4.0	%	ISO 527-2/1A/5
Flexural Modulus <sup>2</sup>	696000	psi	ISO 178
Flexural Stress <sup>2</sup>	21000	psi	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength			ISO 179/1eA
-22°F	2.1	ft·lb/in <sup>2</sup>	
73°F	2.4	ft·lb/in <sup>2</sup>	
Charpy Unnotched Impact Strength (73°F)	23	ft·lb/in <sup>2</sup>	ISO 179/1eU
Notched Izod Impact Strength			ISO 180/1A
-22°F	2.0	ft·lb/in <sup>2</sup>	
73°F	2.4	ft·lb/in <sup>2</sup>	
Unnotched Izod Impact Strength (73°F)	21	ft·lb/in <sup>2</sup>	ISO 180/1U
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	401	°F	ISO 75-2/Bf
Deflection Temperature Under Load 264 psi, Unannealed	329	°F	ISO 75-2/Af
Melting Temperature <sup>3</sup>	500	°F	ISO 11357-3

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**Processing Information**

<b>Injection</b>	<b>Nominal Value</b>	<b>Unit</b>
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	428 to 500	°F
Mold Temperature	104 to 158	°F
Injection Rate	Moderate	
<b>Extrusion</b>	<b>Nominal Value</b>	<b>Unit</b>
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