

# Radilon® S BMZ200W 100 NT

## Radici Group High Performance Polymers - Polyamide 6

### General Information

#### Product Description

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

Suitable for blow-moulding of tubes and containers requiring excellent impact resistance, even at low temperatures, such as hydrogen tanks.

#### General

Additive	• Heat Stabilizer	• Impact Modifier	
Features	• Good Impact Resistance • Heat Stabilized	• High Viscosity • Impact Modified	• Low Temperature Impact Resistance
Uses	• Containers	• Tanks	• Tubing
Agency Ratings	• EU 2011/65/EC		
RoHS Compliance	• RoHS Compliant		
Appearance	• Natural Color		
Processing Method	• Extrusion	• Injection Blow Molding	
Resin ID (ISO 1043)	• PA6-HI		

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

Physical	Dry	Conditioned	Unit	Test Method
Density	1.05	--	g/cm <sup>3</sup>	ISO 1183
Melt Mass-Flow Rate (MFR) 275°C/5.0 kg	3.0	--	g/10 min	ISO 1133
Water Absorption Saturation, 73°F, 0.0787 in	5.5	--	%	ISO 62
Water Absorption Equilibrium, 73°F, 0.0787 in, 50% RH	1.6	--	%	ISO 62
Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus	218000	--	psi	ISO 527-1/1A/1
Tensile Stress (Yield)	5800	--	psi	ISO 527-2/1A/50
Tensile Strain (Yield)	4.7	--	%	ISO 527-2/1A/50
Nominal Tensile Strain at Break	> 100	--	%	ISO 527-2/1A/50
Flexural Modulus <sup>2</sup>	218000	--	psi	ISO 178
Flexural Stress <sup>2</sup>	7980	--	psi	ISO 178
Impact	Dry	Conditioned	Unit	Test Method
Charpy Notched Impact Strength -40°F	34	--	ft·lb/in <sup>2</sup>	ISO 179/1eA
73°F	45	--	ft·lb/in <sup>2</sup>	
Thermal	Dry	Conditioned	Unit	Test Method
Vicat Softening Temperature	239	--	°F	ISO 306/B50
Melting Temperature <sup>3</sup>	424	--	°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

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Flammability	Dry	Conditioned	Unit	Test Method
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 518	°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	464 to 500	°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