

# Radilon® S RV250 FR2 5138 OR

## Radici Group High Performance Polymers - Polyamide 6

### General Information

#### Product Description

PA6 25% glass fibre reinforced flame retardant injection moulding grade. Halogen and red phosphorus free. Orange colour (comparable to RAL 2003) stable at high temperature.

Suitable for parts requiring fire retardancy along with good stiffness. V-2 according to UL-94.

#### General

Filler / Reinforcement	• Glass Fiber, 25% Filler by Weight		
Additive	• Flame Retardant		
Features	• Flame Retardant • Good Stiffness	• Halogen Free • High Heat Resistance	• Low (to None) Phosphorus Content
Agency Ratings	• EU 2011/65/EC		
RoHS Compliance	• RoHS Compliant		
Appearance	• Orange		
Forms	• Pellets		
Processing Method	• Injection Molding		
Resin ID (ISO 1043)	• PA6-GF25 FR(30)		

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

Physical	Nominal Value	Unit	Test Method
Density	1.38	g/cm <sup>3</sup>	ISO 1183
Water Absorption (Saturation, 73°F, 0.0787 in)	5.5	%	ISO 62
Water Absorption Equilibrium, 73°F, 0.0787 in, 50% RH	1.3	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	885000	psi	ISO 527-1/1A/1
Tensile Stress (Break)	11600	psi	ISO 527-2/1A/5
Tensile Strain (Break)	3.1	%	ISO 527-2/1A/5
Flexural Modulus <sup>2</sup>	870000	psi	ISO 178
Flexural Stress <sup>2</sup>	20300	psi	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength (73°F)	1.7	ft·lb/in <sup>2</sup>	ISO 179/1eA
Charpy Unnotched Impact Strength (73°F)	23	ft·lb/in <sup>2</sup>	ISO 179/1eU
Thermal	Nominal Value	Unit	Test Method
Melting Temperature <sup>3</sup>	428	°F	ISO 11357-3
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
Comparative Tracking Index (Solution A)	550	V	IEC 60112
Flammability	Nominal Value	Unit	Test Method
Burning Rate (0.118 in)	0.0	in/min	ISO 3795
Flame Rating (0.031 in)	V-2		UL 94
Glow Wire Flammability Index (0.08 in)	1760	°F	IEC 60695-2-12

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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	0.15	%
Processing (Melt) Temp	464 to 536	°F
Mold Temperature	176 to 194	°F
Injection Rate	Moderate-Fast	

**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