RADIFLAM S RV300 HFL 5138 OR

PA6-GF30 RadiciGroup High Performance Polymers

Product Texts

PA6 flame retardant injection moulding grade, halogen and red phosphorus free. 30% glass fibre reinforced. Orange colour (comparable to RAL 2003) stable at high temperature.

Suitable for parts requiring fire retardancy along with high stiffness and good mechanical resistance. Good electrical insulating properties. Laser markable grade. Rated V-0 according to UL-94.

Processing/Physical Characteristics	dry / cond	Unit	Test Standard
ISO Data			
[C] Molding shrinkage, parallel	**0.2 / ***	%	ISO 294-4, 2577
[C] Molding shrinkage, normal	**0.6 / ***	%	ISO 294-4, 2577

[C]: CAMPUS

Mechanical properties	dry / cond	Unit	Test Standard
ISO Data			
[C] Tensile Modulus	**11200 / -**	MPa	ISO 527
[C] Stress at break	**115 / -**	MPa	ISO 527
[C] Strain at break	**2 / -**	%	ISO 527
[C] Charpy impact strength, +23°C	**40 / -**	kJ/m²	ISO 179/1eU
[C] Charpy notched impact strength, +23°C	**7 / -**	kJ/m²	ISO 179/1eA

[C]: CAMPUS

Thermal properties	dry / cond	Unit	Test Standard
ISO Data			
[C] Melting temperature, 10°C/min	**220 / ***	°C	ISO 11357-1/-3
[C] Burning Behav. at thickness h	**V-0 / ***	class	IEC 60695-11-10
Thickness tested	**0.8 / ***	mm	-

[C]: CAMPUS

Electrical properties	dry / cond	Unit	Test Standard
ISO Data			
[C] Volume resistivity	**1E13 / 1E11**	Ohm*m	IEC 62631-3-1
[C] Surface resistivity	*** / 1E10**	Ohm	IEC 62631-3-2
[C] Comparative tracking index	**600 / -**	-	IEC 60112

[C]: CAMPUS

Other properties	dry / cond	Unit	Test Standard
[C] Water absorption	**4.4 / ***	%	Sim. to ISO 62
[C] Humidity absorption	**1.2 / ***	%	Sim. to ISO 62
[C] Density	**1460 / -**	kg/m³	ISO 1183

[C]: CAMPUS

Characteristics

Processing
Injection Molding

Delivery form
Granules

Additives
Release agent

Special Characteristics
Flame retardant, Halogen-free, Phosphorus-free, Heat stabilized or stable to heat

Features
Laser Markable

Regional Availability
North America, Europe, Asia Pacific, South and Central America, Near East/Africa

Other text information

Injection molding

The material is delivered in moisture-proof packaging ready for processing. Maximum recommended water content for best processing is 0.10%. Typical conditions with a desiccant drier: temperature 80 ° C, dew point -20 ° C or below, time 2-4 h or more. Avoid excessive shear rates and high thermal stresses for better processing. Special care must be taken to avoid moisture absorption and contamination with other polymers when adding regrind material. Colour variation and mechanical properties reduction may occur and should always be carefully monitored.

Injection Molding Processing Parameters

Melt Temperature	Mold Temperature	Injection Speed
250 - 280°C	80 - 100°C	medium-high