

# RADIFLAM S AE 121 C NAT

*Material code**Colour code*

## DESCRIPTION

PA6 flame retardant injection moulding grade. Natural colour.

Suitable for parts requiring flame retardancy. Rated V-0 according to UL-94.

ISO 1043 : PA6 FR(17+20)

## MATERIAL HANDLING AND PROCESSING

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.

### Processing Parameters

Melt Temperature:	Mold Temperature:	Injection Speed:
240 ÷ 280 °C	70 ÷ 80 °C	Medium

## PRODUCT SAFETY AND APPROVALS

For safety instruction please refer to Material Safety Data Sheet



Underwriters Laboratories Inc. certified material. File number: E116324 [www.ul.com](http://www.ul.com)

RoHS compliant 2002/95/CE and following amendments

## Technical data sheet

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PROPERTY		STANDARD	UNIT	VALUE	
				DAM*	Cond**
<b>Physical Properties</b>					
Density		ISO 1183	Kg/m <sup>3</sup>	1330	
<b>Mechanical Properties</b>					
Tensile Modulus	1mm/min	ISO 527-2/1A	MPa	3250	
Stress at Yield	50mm/min	ISO 527-2/1A	MPa	65	
Nominal Strain at Break	50mm/min	ISO 527-2/1A	%	15	
Flexural Modulus	2mm/min	ISO 178	MPa	2950	
Flexural Strength	2mm/min	ISO 178	MPa	105	
Charpy Notched Impact Strength	+23°C	ISO 179/1 eA	KJ/m <sup>2</sup>	5,5	
<b>Thermal Properties</b>					
Melting Temperature	10°C/min	ISO 11357-1-3	°C	220	
Heat Deflection Temperature	1.8 MPa	ISO 75/2 A f	°C	80	
Heat Deflection Temperature	0.45 MPa	ISO 75/2 B f	°C	190	
Vicat Softening Temperature	50°C/h	ISO 306/B50 50N	°C	185	
<b>Flammability Properties</b>					
Flammability	0.8mm	UL 94	class	V0	
Glow Wire Flammability Index	1mm / 2mm	IEC 60695-2-1/2	°C/mm	960 / 960	
Glow Wire Ignition Temperature	1mm / 2mm	IEC 60695-2-1/3	°C/mm	775 / 775	
Automotive interior flammability	Burn rate	FMVSS302	mm/min	0	
<b>Electrical Properties</b>					
Volume resistivity	500V	IEC 60093	ohm · m	1 E+13	1 E+11
Surface resistivity	500V	IEC 60093	ohm	1 E+12	1 E+10
Comparative Tracking Index	Sol.A	IEC 60112	V	300	

\*DAM = Dry As Moulded state \*\*Cond = Conditioned state similar to ISO 1110 \*\*\*Melt Temp [°C] / Mold Temp [°C] / Cavity press [MPa]