

# RADILON S USZ200K 339 BK

PRELIMINARY

## DESCRIPTION

PA6 Super impact modified at sub-ambient temperatures, heat stabilized, injection moulding grade, Black colour.

Suitable for parts requiring moderate stiffness and excellent low temperature impact resistance such as hydrogen tanks.

ISO 1043: PA6-HI

REGIONAL AVAILABILITY: North America, Europe, Asia Pacific, South and Central America, Near East/Africa

*THE CHARACTERISTICS SHOWN HERE MUST BE CONSIDERED PRELIMINARY AND INDICATIVE FOR A PRODUCT AT DEVELOPMENTAL STAGE*

## 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.

Injection Molding Processing Parameters

Melt Temperature  
250 - 280°C

Mold Temperature  
70 - 80°C

Injection Speed  
medium

## PRODUCT SAFETY AND APPROVALS

For safety instruction please refer to Material Safety Data Sheet  
ROHS compliant 2011/65/EU and following amendments



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PROPERTY	STANDARD	UNIT	VALUE	
			DAM*	Cond**
<b>PHYSICAL PROPERTIES</b>				
Density	ISO 1183	kg/m <sup>3</sup>	1060	
Moulding shrinkage - Parallel / Normal	ISO 294-4	%	1.5 / 1.4	
Water Absorption, immersion at 23°C	ISO 62	%	7.9	
Moisture Absorption 23°C - 50%RH	ISO 62	%	2	
<b>MECHANICAL PROPERTIES</b>				
Tensile Modulus	ISO 527-2/1A	MPa	1460	
Stress at Yield	ISO 527-2/1A	MPa	38	
Yield Strain	ISO 527-2/1A	%	4.8	
Nominal Strain at Break	ISO 527-2/1A	%	>120	
Flexural Modulus	ISO 178	MPa	1430	
Flexural Strength	ISO 178	MPa	52	
Charpy Impact Strength	ISO 179/1eU	kJ/m <sup>2</sup>	N	
Charpy Notched Impact Strength	ISO 179/1eA	kJ/m <sup>2</sup>	109	
Charpy Notched Impact Strength	ISO 179/1eA	kJ/m <sup>2</sup>	73	
Charpy Notched Impact Strength	ISO 179/1eA	kJ/m <sup>2</sup>	25	
<b>THERMAL PROPERTIES</b>				
Melting Temperature	ISO 11357-1/-3	°C	220	
Coeff. of Linear Therm. Expansion	ISO 11359-1/-2	E-6/K	116	
Coeff. of Linear Therm. Expansion	ISO 11359-1/-2	E-6/K	219	
Automotive Interior Flammability	ISO 3795	mm/min	0	
<b>ELECTRICAL PROPERTIES</b>				
Volume Resistivity	IEC 62631-3-1	Ohm*m	1E13	
Surface Resistivity	IEC 62631-3-2	Ohm	1E12	

\*: DAM = Dry As Moulded state according to ISO 16396-2, \*\*: Cond = Conditioned state similar to ISO 1110

1: Melt Temperature [°C] / Mold Temperature [°C] / Cavity Pressure [MPa]

