

Radilon® S EP25TW 3734 BK

Radici Group High Performance Polymers - Polyamide 6

General Information

Product Description

Polyamide 6 compound formulated primarily for flexible extrusion applications, in particular flexible tubing and convolute tubing.

This product exhibits a balance of outstanding chemical resistance, flexibility, ductility and toughness.

General

Features	<ul style="list-style-type: none"> • Chemical Resistant • Ductile 	<ul style="list-style-type: none"> • Good Flexibility • Good Toughness
Uses	<ul style="list-style-type: none"> • Automotive Applications 	
Agency Ratings	<ul style="list-style-type: none"> • EU 2011/65/EC 	
RoHS Compliance	<ul style="list-style-type: none"> • RoHS Compliant 	
Processing Method	<ul style="list-style-type: none"> • Extrusion 	<ul style="list-style-type: none"> • Injection Molding
Resin ID (ISO 1043)	<ul style="list-style-type: none"> • PA6.I 	

Properties¹

Physical	Nominal Value	Unit	Test Method
Density	1.10	g/cm ³	ISO 1183
Melt Mass-Flow Rate (MFR) (235°C/2.16 kg)	29	g/10 min	ISO 1133
Molding Shrinkage ²			ISO 294-4
Across Flow	1.5	%	
Flow	1.3	%	
Viscosity Index - Sulfuric Acid	3880	in ³ /lb	ISO 307
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	131000	psi	ISO 527-1/1A/1
Tensile Stress (Yield)	6530	psi	ISO 527-2/1A/50
Flexural Modulus ³	138000	psi	ISO 178
Flexural Stress ³	4640	psi	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength			ISO 179/1eA
-22°F	4.3	ft·lb/in ²	
73°F	12	ft·lb/in ²	
Charpy Unnotched Impact Strength (73°F)	No Break		ISO 179/1eU
Notched Izod Impact Strength			ISO 180/1A
-22°F	4.8	ft·lb/in ²	
73°F	11	ft·lb/in ²	
Unnotched Izod Impact Strength (73°F)	No Break		ISO 180/1U
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	246	°F	ISO 75-2/Bf
Deflection Temperature Under Load			ISO 75-2/ Af
264 psi, Unannealed	113	°F	
Melting Temperature ⁴	428	°F	ISO 11357-3

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Processing Information

Injection	Nominal Value	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	0.10	%
Processing (Melt) Temp	428 to 500	°F
Mold Temperature	104 to 158	°F
Injection Rate	Moderate	
Extrusion	Nominal Value	Unit
Melt Temperature	428 to 482	°F

Notes

¹ Typical properties: these are not to be construed as specifications.

² 280°C Melt Temperature/ 70°C Mold Temperature/ 50 MPa Cavity Pressure

³ 0.079 in/min

⁴ 10°C/min