Radilon® D 40EP25ZW 7037 BL

Radici Group High Performance Polymers - Polyamide 610

General Information

Product Description

PA610 flexible, high viscosity extrusion grade. Toughened and plasticized. Heat stabilized. Blue colour.

Suitable for extrusion of pipes, profiles and cable jackets. Good impact resistance also at low temperatures. This grade is partially renewably-sourced (64% of base polymer by weight).

General			
Additive	• Heat Stabilizer	• Impact Modifier	• Plasticizer
Features	• Good Flexibility • Good Impact Resistance • Heat Stabilized	• High Viscosity • Impact Modified • Low Temperature Impact Resistance	• Plasticized • Renewable Resource Content
Uses	• Jacketing • Piping	• Profiles • Wire & Cable Applications	
Agency Ratings	• EU 2011/65/EC		
RoHS Compliance	• RoHS Compliant		
Appearance	• Blue		
Processing Method	• Extrusion	• Pipe Extrusion	• Profile Extrusion
Resin ID (ISO 1043)	• PA610-HI-P		

Properties [1]

Physical	Dry	Conditioned	Unit	Test Method
Density	1.05	--	g/cm³	ISO 1183
Molding Shrinkage				ISO 294-4
Across Flow	1.6	--	%	
Flow	1.6	--	%	
Water Absorption				ISO 62
Saturation, 73°F, 0.0787 in	2.0	--	%	
Water Absorption				ISO 62
Equilibrium, 73°F, 0.0787 in, 50% RH	0.90	--	%	
Biobased Carbon Content	64	--	%	
Mechanical	**Dry**	**Conditioned**	**Unit**	**Test Method**
Tensile Modulus	79800	55100	psi	ISO 527-1/1A/1
Tensile Stress (50% Strain)	4060	3480	psi	ISO 527-2/1A
Nominal Tensile Strain at Break	> 100	> 100	%	ISO 527-2/1A/50
Flexural Modulus [2]	69600	47900	psi	ISO 178
Flexural Stress [2]	2900	2180	psi	ISO 178
Impact	**Dry**	**Conditioned**	**Unit**	**Test Method**
Charpy Notched Impact Strength				ISO 179/1eA
-22°F	26	--	ft·lb/in²	
73°F	52	57	ft·lb/in²	
Thermal	**Dry**	**Conditioned**	**Unit**	**Test Method**
Deflection Temperature Under Load				ISO 75-2/Bf
66 psi, Unannealed	212	--	°F	

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Thermal	Dry	Conditioned	Unit	Test Method
Deflection Temperature Under Load				ISO 75-2/Af
264 psi, Unannealed	122	--	°F	
Melting Temperature [3]	424	--	°F	ISO 11357-3
Electrical	**Dry**	**Conditioned**	**Unit**	**Test Method**
Surface Resistivity (500 V)	1.0E+12	1.0E+10	ohms	IEC 62631-3-2
Volume Resistivity (500 V)	1.0E+13	1.0E+11	ohms·m	IEC 62631-3-1

Processing Information

Injection	Dry	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	446 to 500	°F
Mold Temperature	158 to 176	°F
Injection Rate	Moderate	
Extrusion	**Dry**	**Unit**
Melt Temperature	464 to 554	°F

Notes

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

[2] 0.079 in/min

[3] 10°C/min