

Xytron™ U1535E

Envalior - Polyphenylene Sulfide

General Information

Product Description

Unreinforced, Extrusion

Design Challenge

Degradation & Stability | Chemical stability

General

Material Status	• Commercial: Active
Availability	• Africa & Middle East • Asia Pacific • Europe • Latin America • North America
Additive	• Impact Modifier
Features	• Impact Modified
Processing Method	• Extrusion
Resin ID	• PPS-I

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	1.20	g/cm ³	ISO 1183
Melt Mass-Flow Rate (MFR) (315°C/10.0 kg)	4.0	g/10 min	ISO 1133
Melt Volume-Flow Rate (MVR) (315°C/10.0 kg)	4.0	cm ³ /10min	ISO 1133
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	225000	psi	ISO 527-1
Tensile Stress (Break)	5800	psi	ISO 527-2
Tensile Strain (Break)	> 50	%	ISO 527-2
Flexural Modulus	216000	psi	ISO 178
Flexural Stress	8700	psi	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength			ISO 179/1eA
-22°F	9.5	ft·lb/in ²	
73°F	32	ft·lb/in ²	
Charpy Unnotched Impact Strength (73°F)	No Break		ISO 179/1eU
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (264 psi, Unannealed)	203	°F	ISO 75-2/A
Glass Transition Temperature ²	194	°F	ISO 11357-2
Melting Temperature ²	536	°F	ISO 11357-3
CLTE - Flow			ISO 11359-2
--	5.9E-5	in/in/°F	
-- ³	9.6E-5	in/in/°F	
CLTE - Transverse			ISO 11359-2
--	6.4E-5	in/in/°F	
-- ³	9.2E-5	in/in/°F	
Thermal Conductivity ⁴	1.7	Btu·in/hr/ft ² /°F	ASTM E1461
Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	> 1.0E+15	ohms	IEC 62631-3-2
Volume Resistivity	> 1.0E+13	ohms·m	IEC 62631-3-1
Electric Strength (0.0787 in)	530	V/mil	IEC 60243-1
Flammability	Nominal Value	Unit	Test Method
Flammability Classification			IEC 60695-11-10, -20



0.06 in	HB
0.12 in	HB

Notes

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

² 10°C/min

³ above T_g

⁴ through plane

