

TYPICAL PROPERTIES OF Torlon® 5030

Property	Test Method ⁽²⁾	Typical Values ⁽¹⁾			
		U.S. Customary Units		SI Units	
		Value	Units	Value	Units
Mechanical					
Tensile strength					
-321°F (-196°C)	D 1708	29.5	kpsi	204	MPa
73°F (23°C)	D 1708	29.7	kpsi	205	MPa
275°F (135°C)	D 1708	23.1	kpsi	160	MPa
450°F (232°C)	D 1708	16.3	kpsi	113	MPa
Tensile elongation					
-321°F (-196°C)	D 1708	4	%	4	%
73°F (23°C)	D 1708	7	%	7	%
275°F (135°C)	D 1708	15	%	15	%
450°F (232°C)	D 1708	12	%	12	%
Tensile modulus					
73°F (23°C)	D 1708	1560	kpsi	10.8	GPa
Flexural strength					
-321°F (-196°C)	D 790	54.4	kpsi	381	MPa
73°F (23°C)	D 790	48.3	kpsi	338	MPa
275°F (135°C)	D 790	35.9	kpsi	251	MPa
450°F (232°C)	D 790	26.2	kpsi	184	MPa
Flexural modulus					
-321°F (-196°C)	D 790	2040	kpsi	14.1	GPa
73°F (23°C)	D 790	1700	kpsi	11.7	GPa
275°F (135°C)	D 790	1550	kpsi	10.7	GPa
450°F (232°C)	D 790	1430	kpsi	9.9	GPa
Izod impact strength					
Notched	D 256	1.5	ft-lb/in	79	J/m
Unnotched	D 256	9.5	ft-lb/in	504	J/m
Shear strength	D 732	20.1	kpsi	140	MPa
Compressive strength	D 695	38.3	kpsi	260	MPa
Compressive modulus	D 695	1150	kpsi	7.9	GPa
Poisson's ratio		0.43		0.43	
Thermal					
Heat deflection temperature					
at 264 psi (1.82 MPa)	D 648	539	°F	282	°C
Flammability Rating ⁽³⁾	UL-94	94 V-0		94 V-0	
Coefficient of thermal expansion	D 696	9	10 ⁻⁶ in/in/°F	16.2	10 ⁻⁶ m/m/°C
Thermal conductivity	C 177	2.5	Btu-in/hrft ² °F	0.37	W/mK
Oxygen index	D 2863	51	%	51	%
Electrical					
Dielectric strength	D 149	840	V/mil	32.6	kV/mm
Dielectric constant					
at 1 kHz	D 150	4.4		4.4	
at 1 MHz	D 150	4.2		4.2	
Dissipation factor					
at 1 kHz	D 150	0.022		0.022	
at 1 MHz	D 150	0.050		0.050	
Surface resistivity	D 257	1x10 ¹⁸	ohm	1x10 ¹⁸	ohm
Volume resistivity	D 257	6x10 ¹⁶	ohm-in	2x10 ¹⁵	ohm-m
General					
Moisture absorption	D 570	0.24	%	0.24	%
Rockwell hardness	D 785	94		94	
Density	D 1505	0.058	lb/in ³	1.61	g/cm ³

¹Actual properties of individual batches will vary within [specification](#) limits.

²Test methods are ASTM unless otherwise noted.

³These flammability ratings are not intended to reflect hazards presented by these or any other materials under actual fire conditions.