

Sheet Products - Property Comparison

			NP424	NP615	NP634	
			Glass Fabric & Cellulosic Paper	Paper Surface - NP612 Core	Glass Fabric & Cellulosic Paper	
			Epoxy	Melamine	Phenolic	
<b>PHYSICAL PROPERTIES</b>						
Specific Gravity (0.062")		-	Varies with thickness	1.41	Varies with thickness	--
Rockwell Hardness (0.250" Build-up)		M Scale	102	89	108	--
Moisture Absorption (0.062")	Condition D <sub>1</sub> -24/23	%	0.25	3.00	0.72	--
Flexural Strength (0.062")	Condition A	psi	48,000 / 40,000	20,000 / 14,000	51,600 / 44,600	-- / --
	Lengthwise / Crosswise					
Flexural Strength (0.062")	Condition E-1/150 T150	psi	-- / --	-- / --	-- / --	-- / --
	Lengthwise / Crosswise					
Flexural Modulus (0.062")	Lengthwise / Crosswise	kpsi	2,500 / 2,100	1,200 / 1,000	1,800 / 1,500	-- / --
Tensile Strength (0.125")	Lengthwise / Crosswise	psi	44,900 / 34,100	12,500 / 8,400	23,900 / 20,100	-- / --
Izod Impact Strength (0.500")	Condition E-48/50	ft-lb/in (notched)	1.70 / 1.30	0.59 / 0.57	3.34 / 2.24	-- / --
	Lengthwise / Crosswise					
Compressive Strength (0.500")	Flatwise	psi	50,000	18,000	41,500	--
Bonding Strength (0.500")	Condition A	lb	1,400	1,400	1,500	--
	Condition D-48/50		--	--	--	--
Shear Strength (0.062")	Perpendicular	psi	12,500	11,800	14,000	--
<b>THERMAL PROPERTIES</b>						
Maximum Operating Temperature <sup>1</sup>	Electrical / Mechanical	°C	130 / 130	120 / 120	125 / 125	-- / --
Coefficient of Thermal Expansion (0.062")	X-axis / Y-axis	" / " / °C x 10 <sup>-6</sup>	13.0 / 16.0	-- / --	13.0 / 15.0	-- / --
Flammability Rating U.L. 94	Condition A	Class	V-0	HB	HB	--
<b>ELECTRICAL PROPERTIES</b>						
Dissipation Factor (0.062")	Condition D <sub>1</sub> -24/23	-	0.030	0.096	0.037	--
Permittivity (0.062")	Condition D <sub>1</sub> -24/23	-	4.60	6.49	5.20	--
Breakdown Voltage (0.062")	Condition A	kV	60	55	53	--
	Condition D-48/50		40	10	7	--
Electric Strength (0.062")	Condition A	V/mil	675	700	600	--
	Condition D-48/50		400	--	550	--
Arc Resistance D495 (0.125")	Condition A	sec	121	110	120	--
Comparative Tracking Index D3638 (0.125")		V	300	--	200	--

NOTE a: A double dash (--) indicates that the value has not been determined or is not applicable to the product.

NOTE b: All testing per ASTM D348 unless otherwise noted.

<sup>1</sup> NEMA LI-6: This temperature is a recommendation only and is based upon experience in various applications. The maximum operating temperature is dependent upon the application and should be investigated prior to use.