

Specification

NEMA: X

U.L. LISTED: N

DESCRIPTION: Phenolic paper based grade for mechanical applications. Good tensile, compressive and flexural strength. Primarily a machining material, but may be hot punched up to .093" thick.

TYPICAL PROPERTIES

		UNITS	VALUE		
			Thickness Tested		
			0.0625"	0.125"	0.500"
PHYSICAL PROPERTIES					
Specific Gravity <i>(ASTM D792)</i>		-			1.40
Rockwell Hardness <i>(ASTM D785)</i>	0.250" Build-up	M Scale	90		
Moisture Absorption <i>(ASTM D570)</i>	Condition A	%			
	Condition D _{1-24/23}	%	1.80		0.58
Flexural Strength <i>(ASTM D790)</i>	Condition A	psi	34,000 / 28,000		
	LW / CW	(MPa)	(234.4) / (193.1)		
Flexural Modulus <i>(ASTM D790)</i>	Condition A	kpsi	1,900 / 1,400		
	LW / CW	(GPa)	(13.1) / (9.7)		
Tensile Strength <i>(ASTM D638)</i>	Condition A	psi		17,000 / 13,000	
	LW / CW	(MPa)		(117.2) / (89.6)	
Izod Impact Strength <i>(ASTM D256)</i>	Condition A	ft-lb/in			
	LW / CW	(J/cm)			
	Condition E-48/50	ft-lb/in			0.82 / 0.76
	LW / CW	(J/cm)			(0.44) / (0.41)
Compressive Strength <i>(ASTM D695)</i>	Condition A	psi			35,000
	Flatwise	(MPa)			(241.3)
Bonding Strength <i>(ASTM D229)</i>	Condition A	lb			1,000
		(kg)			(453.6)
Shear Strength <i>(ASTM D732)</i>	Condition A	psi	15,000		
	Perpendicular	(MPa)	(103.4)		

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TYPICAL PROPERTIES (continued)

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		Thickness Tested		
		0.0625"	0.125"	0.500"
THERMAL PROPERTIES				
Temperature Index ¹ <i>(UL Bulletin 746b)</i>	Electrical / Mechanical	°C	130 / 130	
Coefficient of Thermal Expansion <i>(IPC-TM 650-2.4.24)</i>	X-axis / Y-axis	" / °C x10 ⁻⁶	13.0 / 17.0	
Flammability Rating <i>(UL Bulletin 94)</i>	Condition A	Class	HB	
ELECTRICAL PROPERTIES				
Breakdown Voltage <i>(ASTM D149)</i>	Condition A	kVolts	40	
Electric Strength <i>(ASTM D149)</i>	Condition A	Volts/mil (kV/cm)	600 (236.2)	
Arc Resistance <i>(ASTM D495)</i>	Condition A	sec	90	

This temperature is a recommendation only, and based upon experience in various applications. The maximum operating temperature is dependent upon the application and should be investigated prior to use.

The data within this document is for reference only. Values above are typical for this grade of material.

It is the responsibility of the end user of this information to validate the data in this document. K&E Plastics, Inc. assumes no liability for the use of this data.

Users are urged to contact K&E Plastics, Inc. to determine if the Specification has been revised.