WS Hampshire Inc.
Over 100 Years of Non-Metallic Material Fabrication

Ryertex
The leading brand of Phenolics for over 50 years

Ryertex Grade 223-Marine
TECHNICAL DATA BULLETIN

NEMA GRADE - **U. L. LISTED:** No

DESCRIPTION: Ryertex 223-Marine is a medium weave, thermoset cotton phenolic that is formulated to meet MIL-P-18324D. This grade is similar to a NEMA grade C but is made with a modified phenolic resin to reduce moisture absorption. It is commonly used for pintle and stave-type bearings for rudder shafts in the marine industry. It is easy to machine while holding tight tolerances and has superior load-bearing properties with a low coefficient of friction.

TYPICAL PROPERTIES

GENERAL PHYSICAL PROPERTIES	UNITS	VALUE
Denisty	Lb/in3	0.052
Moisture Absorption (0.125”)	%	1.20
Rockwell Hardness (0.125”)	M Scale	105
Flexural Strength (0.125”)	Psi	LW - 18,000
Shear Strength – Flatwise (0.125”)	Psi	13,000
Tensile Strength (0.125)	psi	LW – 12,000
Bond Strength (0.500)	Lb	1,700
Izod Impact Strength E-48/50 (0.125”)	Ft-lb/in	1.60
Compressive Strength (flatwise – 0.125)	psi	38,000
THERMAL & ELECTRICAL PROPERTIES	**UNITS**	**VALUE**
Temperature Index (mechanical / electrical)	C	125/115[1]
Electric Strength (perpendicular- short exposure)	V/mil	200

All testing per ASTM D-348 unless otherwise noted. This data, while believed to be accurate and based on reliable analytical methods, is for informational purposes only. Data supplied above are "typical values"; not to be considered "specification values".

It is the responsibility of the users of this information to make sure that they have the latest version of this TDB, and are urged to check with Customer Service to determine if information is most current.

[1] This temperature is a recommendation only. The maximum operating temperature is dependent upon the application and should be tested accordingly.

WS Hampshire
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