



Ryertex HD/A

TECHNICAL DATA BULLETIN

GRADE: 70

U. L. LISTED: No

Ryertex HD/A consists of multiple plies of heavy-weight canvas cloth (24oz/syd), twice saturated with phenolic resin and modified with *alumina* which adds hardness and extends bearing wear without seizing to metal shafts. The improved cured properties of the material creates a homogenous construction that offers optimal part performance. The material has a red color that aids in bearing surface inspection. HD/A laminates offer high load-bearing and coefficient of thermal expansion values equivalent to those of brass and bronze but will not seize to metal shafts which reduces maintenance downtime. Ryertex HD/A can be used to make steel & aluminum mill bearings with oil or water lubrication requirements and water-cooled stove bearings for marine applications. **Thickness tested: 0.500"**

TYPICAL PROPERTIES

GENERAL PHYSICAL PROPERTIES	UNITS	VALUE
Specific Gravity	-	1.42
Moisture Absorption	%	0.63
Rockwell Hardness	M Scale	95
Flexural Strength	Psi	LW – 20,200 CW – 13,600
Flexural Modulus	Kpsi	LW – 1,358 CW – 1,034
Tensile Strength	psi	LW – 11,400 CW – 11,300
Bond Strength (Condition A / D-48/50)	Lb	LW – 2,300 CW – 2,100
Shear Strength (perpendicular)	Psi	13,900
Compressive Strength (flatwise – 0.500)	psi	36,500
Izod Impact Strength -- E-48/50	Ft-lb/in Nothced	6.36 2.83
THERMAL & ELECTRICAL PROPERTIES	UNITS	VALUE
Maximum Operating Temperature	C	125 ¹
Coefficient of Thermal Expansion	$^{\circ}\text{F}^{\circ}\text{C} \times 10^{-6}$	X-Axis – 27.6 Y-Axis – 19.5

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.