



T-791 is a canvas fabric phenolic laminate capable of being formed, when heated, into simple shapes. Grade T-791 is based on Spaulding's proprietary resin system that contributes to the grade's unique forming characteristics and excellent record in wear ring applications.

MAJOR FEATURES

- Can be Formed Accurately
- Good Dimensional Stability when Exposed to Hydraulic Oil
- High Strength
- Low Water Absorption

Applications

Grade T-791 is commonly used for wear rings and seals for hydraulic cylinders.

ELECTRICAL CHARACTERISTICS

Although not primarily recommended for its electrical properties, Grade T-791 has electrical properties similar to NEMA C laminates and is adequate for applications involving moderate voltage.

MECHANICAL CHARACTERISTICS

T-791 is a strong, tough laminate that retains its dimensions and strength when exposed to hydraulic oil. Even when sanded on two sides, Grade T-791 typically swells less than .3% in thickness and retains more the 95% of its flexural strength after 7 days in hydraulic oil.

FABRICATION

T-791 is machined to shape from sheet form. It is readily fabricated using standard machine tools and can be turned, milled, drilled, shaped and otherwise machined in much the same manner as brass. Since Grade T-791 is basically a semi-post forming grade of laminate, it is usually not offered in thicknesses above .250" because of forming limitations.

STANDARD SHEET SIZE 48" x 36"

COLOR: NATURAL

THICKNESS: .031" – .250"



ENGINEERING DATA SHEET
GRADE: T-791 LAMINATE SHEET

Revision: 01 Issued: 4/25/2007

PROPERTY CHARACTERISTICS

PROPERTY	ASTM TEST METHOD	CONDITIONING & TYPE OF TEST	THICKNESS INCHES	AVERAGE TYPICAL VALUES		INDUSTRY REQUIREMENTS	
				ENGLISH	SI	ENGLISH	SI
ELECTRICAL							
Dielectric Breakdown (Parallel-Taper Pin)	D-229	A (S/S)	.125	80+ kV	80+ kV	NR	NR
Dielectric Strength (Perpendicular)	D-229	A (S/T) A (S/S)	.125 .125	325 V/M 242 V/M	12.8 kV/mm 9.5 kV/mm	NR NR	NR NR
MECHANICAL							
Compressive Strength (Flatwise)	D-229	A	.500	44.0 ksi	303.4 MPa	≥31.5 ksi	≥217.0MPa
Flexural Strength (Flatwise)	D-229	A Lengthwise Crosswise	.125 .125	27.8 ksi 20.3 ksi	191.4 MPa 139.9 MPa	≥17.0 ksi ≥16.0 ksi	≥117.2MPa ≥110.3MPa
Izod Impact Edgewise Notched	D-229	E-48/50 Lengthwise Crosswise	.500 .500	2.6 ft-lbs/in 2.4 ft-lbs/in	.140 J/mm .129 J/mm	NR NR	NR NR
Tensile Strength	D-229	A Lengthwise Crosswise	.125 .125	12.5 ksi 10.0 ksi	86.2 MPa 68.9 MPa	≥5.1 ksi NR	≥35 MPa NR
PHYSICAL							
Density	D-792	A	.125	.050 lbs/in ³	1.38 g/cm ³	.045-.051 lbs/in ³	1.25-1.40 g/cm ³
Rockwell Hardness	D-229	A	.125	M-111	M-111	90-115	90-115
Water Absorption	D-229	D1-24/23	.125	1.03%	1.03%	≤2.50%	≤2.50%