



Spauldite® T-601 is a medium-weave cotton fabric (canvas) base phenolic laminate with good physical strength and a high degree of physical toughness and resistance to shock and impact loads. Grade T-601 is resistant to many corrosive chemicals and can be machined to a relatively smooth surface. Grade T-601 is a very versatile laminate meeting a wide range of mechanical requirements. This grade exceeds NEMA C; MIL-P-15035, Type FBM; LP 509 II C.

**MAJOR FEATURES**

- Physical Toughness
- Good Impact Strength
- Good Wearing Qualities
- Readily Machined
- High Strength-Weight Ratio
- Good Mechanical Strength

**Applications**

Resistance to physical abuse and the ability to support heavy static and dynamic loads suggest the use of Grade T-601 in a wide variety of mechanical and structural applications. Bearings, wear plates, rub bars, valve seats and discs, star wheels, heat exchanger baffles, thrust washers, cams, pulleys, piston rings and chain guides are typical of such applications. Grade T-601 is especially recommended for gears up to 26 pitch (for finer pitch gears refer to Grade T-733) and produces gears that are quiet running and that have good tooth strength.

**ELECTRICAL CHARACTERISTICS**

While not primarily recommended as an electrical insulating material, T-601 is adequate for many non-critical applications when operated in a dry environment.

**FABRICATION**

T-601 can be routed, milled, drilled, shaped and otherwise machined quite readily with standard production equipment. As with all glass base laminates, carbide cutting tools are suggested.

**MECHANICAL CHARACTERISTICS**

T-601 shows remarkable resistance to both static and dynamic loads. High flexural and compressive strength combined with good impact strength and resilience gives T-601 superior resistance to physical abuse. The high strength-weight ratio, corrosion resistance and good wearing qualities of this grade give it extra value in a wider variety of applications.

Surface can be ground or sanded. Good machining practices will produce very smooth surfaces, intricate shapes, and close tolerances.

STANDARD SHEET SIZE 48" x 36"

COLOR: NATURAL

THICKNESS: .032" – 10.000"

**PROPERTY CHARACTERISTICS**

PROPERTY	ASTM TEST METHOD	CONDITIONING & TYPE OF TEST	THICKNESS INCHES	AVERAGE TYPICAL VALUES		INDUSTRY REQUIREMENTS	
				ENGLISH	SI	ENGLISH	SI
<b>ELECTRICAL</b>							
Dielectric Breakdown (Parallel-Taper Pin)	D-229	A (SS)	.125	35.0 kV	35.0 kV	≥15.0 kV	≥15.0 kV
<b>MECHANICAL</b>							
Bonding Strength	D-229	A D-48/50	.500 .500	2,000 lbs	8.90 kN	≥1800 lbs	≥8.01 kN
				1,800 lbs	8.01 kN	≥1600lbs	≥7.12 kN
Compressive Strength Flatwise	D-229	A	.125	35.0 ksi	241.3 MPa	NR	NR
Flexural Strength Flatwise	D-229	A Lengthwise Crosswise	.125	18.0 ksi	124.1 MPa	≥17.0 ksi	≥117.2MPa
			.125	17.0 ksi	117.2 MPa	≥16.0 ksi	≥110.3MPa
Izod Impact Edgewise Notched	D-229	E-48/50 Lengthwise Crosswise	.500	2.5 ft-lbs/in	.133 J/mm	≥2.1 ft-lbs/in	≥.112 J/mm
			.500	2.4 ft-lbs/in	.128 J/mm	≥1.9 ft-lbs/in	≥.101 J/mm
Shear Strength	L-P-406 Method 1041	A Lengthwise	.125	11.0 ksi	75.8 MPa	NR	NR
Tensile Strength	D-229	A Lengthwise Crosswise	.125	10.0 ksi	68.9 MPa	NR	NR
			.125	8.7 ksi	60.0 MPa	NR	NR
<b>PHYSICAL</b>							
Density	D-792	A	.125	.049 lbs/in <sup>3</sup>	1.36 g/cm <sup>3</sup>	.045-.051 lbs/in <sup>3</sup>	1.25-1.40 g/cm <sup>3</sup>
Rockwell Hardness	D-229	A	.125	M-102	M-102	90-115	90-115
Water Absorption	D-229	E-1/105 + D1-24/23	.125	1.80%	1.80%	≤2.50%	≤2.50%