



## ENGINEERING DATA SHEET

### GRADE: SPAULDITE® T-339-TR TUBING

Spauldite® Grade T-339-TR is an ultra fine weave cotton fabric base tube utilizing a special low odor phenolic resin developed especially to meet the needs of precision ball bearing retainer manufacturers. The ultra fine weave fabric used in T-339-TR improves machinability over tubing made with coarser fabrics. The enhanced machinability is required for some very small retainers.

This special Spauldite® tubing grade is similar to NEMA LE but has proven to have the lubrication retention properties, dimensional stability characteristics and the machinability important to ball bearing retainer fabricators.

Standard tube sizes available include inside diameters from .093 – 13.500 inches and outside diameters to 16.000 inches. Wall thickness from .020 – 1.000 inches are available depending on the inside diameter. 44-inch lengths are standard above .187 inch I.D. 36-inch lengths will be provided for I.D.'s .125 - .187 inches. 18 inches lengths will be provided for I.D.'s .124 inches and below.

Typical values shown on the preliminary data sheet are offered as preliminary data subject to revision as more test data becomes available.

#### PROPERTY CHARACTERISTICS

PROPERTY	ASTM TEST METHOD	CONDITIONING & TYPE OF TEST	WALL THICKNESS (INCHES)	AVERAGE TYPICAL VALUES <sup>1</sup>		NEMA LE REQUIREMENTS	
				ENGLISH	SI	ENGLISH	SI
<b>DIELECTRIC</b>							
Dielectric Strength Perpendicular	D-348	A (S.T.)	.125	160 V/Mil	6.3 KV/mm	≥140 V/Mil	≥5.5 KV/mm
<b>MECHANICAL</b>							
Compressive Strength Axial	D-348	A	.125	26.0 ksi	179.3 MPa	≥13.0 ksi	≥89.6 Mpa
Tensile Strength	D-348	A	.125	12.0 ksi	82.7 MPa	NR	NR
<b>PHYSICAL</b>							
Density	D-348	A	.125	.046 lb/in <sup>3</sup>	1.28 g/cm <sup>3</sup>	≥.041 lb/in <sup>3</sup>	≥1.14 g/cm <sup>3</sup>
Water Absorption	D-348	D-24/23	.125	2.0%	2.0%	≤2.5%	≤2.5%
Rockwell Hardness M Scale	D-348	A	.125	95	95	NR	NR

<sup>1</sup> Data shown is based on tube size .875 I.D. X 1.125 O.D. (.125 Wall)

*"To the best of our knowledge the information contained herein is accurate; however, Spaulding Composites Company, Inc. does not accept any liability regarding the accuracy or completeness of such information. Further, such information is based on standard base material and thus may change if the product ordered by purchaser requires further processing of base material by us and/or the purchaser. Purchaser has the sole responsibility in determining the suitability of any material described herein for the use contemplated and the processing of such material by purchaser."*