


Spaulding
 COMPOSITES INC

ENGINEERING DATA SHEET
GRADE: SPAULDITE® T-827-TR TUBING

 Reprint of: _____ Issued: 0207

Spauldite® Grade T-827-TR is a fine weave cotton base tube utilizing a special low odor phenolic resin developed especially to meet the needs of fabricators. This special Spauldite® tubing grade exceeds NEMA LE and MIL-I-24768/13 type FBE specifications with superior mechanical and dielectric properties.

Standard tube sizes available include inside diameters from .156 – 22.000 inches and outside diameters to 24.000 inches. Wall thickness from .031 – 4.000 inches are available depending on the inside diameter. 48-inch lengths are standard above .187 inch I.D. 36-inch lengths will be provided for I.D.'s .187 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 ¹		NEMA LE & MIL-I-24768/13 REQUIREMENTS	
				ENGLISH	SI	ENGLISH	SI
DIELECTRIC							
Dielectric Strength Perpendicular	D-348	A (S.T.)	.125	180 V/Mil	8.0 Kv/mm	≥140 V/Mil	≥5.5 Kv/mm
MECHANICAL							
Compressive Strength Axial	D-348	A	.125	18.0 ksi	124.1 MPa	≥13.0 ksi	≥89.6 Mpa
Tensile Strength	D-348	A	.125	9.0 ksi	62.1 MPa	NR	NR
PHYSICAL							
Density	D-348	A	.125	.047 lb/in ³	1.29 g/cm ³	≥.041 lb/in ³	≥1.14 g/cm ³
Water Absorption	D-348	D-24/23	.125	1.65%	1.65%	≤2.5%	≤2.5%
Rockwell Hardness M Scale	D-348	A	.125	90	90	NR	NR

¹ Data shown is based on tube size 0.875" I.D. x 1.125" O.D.

"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."