NP525

INTRODUCTORY

TECHNICAL DATA BULLETIN

GRADE: NP525 **NEMA GRADE:** -- **U. L. LISTED:** N

DESCRIPTION: NP525 is a member of the *Shot*Blocker™ family of products. Being a high performance composite manufactured from AGY Quicksilver™ R Glass reinforcement with a high-temperature phenolic resin system, NP525 was developed to comply with stringent Military requirements as a ballistic resistant material. NP525 complies with MIL-DTL-64154 Class B Code 2.

THICKNESS TESTED: 0.440″, 0.500″

TYPICAL PROPERTIES

BALLISTIC PROPERTIES		**UNITS**	**VALUE**
V50 Ballistic Limit (0.500″)	CAL30FSP	fps	2580
GENERAL PHYSICAL PROPERTIES		**UNITS**	**VALUE**
Specific Gravity (0.440″)		-	2.06
Rockwell Hardness (0.440″)		M Scale	96
Moisture Absorption (0.440″) Condition D_i-24/23		%	1.6
Flexural Strength (0.440″) Condition A	LW / CW	psi	30,600 / 26,000
Hot Flex Strength (0.440″) Condition E-1/150, T-150	LW / CW	psi	23,500 / 19,900
Flexural Modulus (0.440″) Condition A	LW / CW	kpsi	4,070 / 3,890
Hot Flexural Modulus (0.440″) Condition E-1/150, T-150	LW / CW	kpsi	3,670 / 3,460
Tensile Strength (0.440″) Condition A	LW / CW	psi	65,700 / 59,800

Hot Tensile Strength (0.440″) Condition E-1/150, T-150	LW / CW	psi	44,000 / 40,600
Tensile Modulus (0.440″) Condition A	LW / CW	kpsi	5,520 / 5,420
Izod Impact Strength (0.440″) Condition E-48/50	LW / CW	ft-lb/in notched	41.1 / 40.9
Compressive Strength (0.440″) Condition A	Flatwise	psi	94,000
Hot Compressive Strength (0.440″) Condition E-1/150, T-150	Flatwise	psi	77,000
Compressive Modulus (0.440″) Condition A	Flatwise	kpsi	1,030
Bond Strength (0.440″) Condition A Condition D-48/50		lb	930 650
Shear Strength (0.440″)	Perpendicular	psi	44,900

THERMAL & ELECTRICAL PROPERTIES		**UNITS**	**VALUE**
Temperature Index	Electrical / Mechanical	°C	210 / 150[1]
Flammability Rating - U. L. 94 (0.440″)		Class	V0
Breakdown Voltage (0.440″) Condition A		kV	39.0

[1] NEMA LI-6: This temperature is a recommendation only, and based upon experience in various applications. The maximum operating temperature is dependent upon the application and should be investigated prior to use.

This data, while believed to be accurate and based on reliable analytical methods, is for informational purposes only. The terms and conditions of the agreement under which it is sold will govern any sales of this product. 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 or, preferably our web site, www.norplex-micarta.com, to determine if information is most current.

Specification writers: Contact Norplex-Micarta for speciation values before submission.