NORPLEX MICARTA
Global Thermoset Composite Solutions

MC511WR

TECHNICAL DATA BULLETIN

GRADE: MC511WR **IEC 60893-3-2 EP GC 205** **U. L. LISTED:** N

DESCRIPTION: MC511WR is a woven roving glass fabric combined with a high temperature epoxy resin system. MC511WR maintains high mechanical, electrical and physical properties at elevated temperatures. MC511WR meets IEC 60893-3-2 EP GC 205.

THICKNESS TESTED: 1.57mm, 3.18mm & 12.70mm

TYPICAL PROPERTIES

PHYSICAL PROPERTIES		UNITS	VALUE		
			Thickness Tested		
			1.57mm	3.18mm	12.70mm
Moisture Absorption *(IEC 60893-2/8.2)*	Condition A	mg	9.0	10.2	12.9
Flexural Strength *(IEC 60893-2/5.1)*	Condition A LW / CW	Mpa	710 / 525	690 / 465	535 / 430
Hot Flexural Strength *(IEC 60893-2/5.1)*	E 150 / T 150 LW / CW	Mpa	705 / 495	590 / 400	430 / 325
Flexural Modulus *(IEC 60893-2/5.1)*	Condition A LW / CW	Mpa	23,400 / 20,500	22,600 / 18,800	21,400 / 19,700
Hot Flexural Modulus *(IEC 60893-2/5.1)*	E 150 / T 150 LW / CW	Mpa	25,300 / 20,400	19,900 / 17,700	18,700 / 14,800
Izod Impact Strength *(IEC 60893-2/5.4.3)*	Condition A LW / CW	kJ/m^2			265 / 220
Charpy Impact Strength *(IEC 60893-2/5.4.2)*	Condition A LW / CW	kJ/m^2			275 / 220

THERMAL PROPERTIES		UNITS	VALUE		
			Thickness Tested		
			1.57mm	3.18mm	12.70mm
Flammability Vertical *(IEC 60893-2/7.2)*	Condition A	Class	HB	HB	HB
ELECTRICAL PROPERTIES					
Breakdown Voltage *(IEC 60893-2/6.1)*	Condition A	kVolts		76	79
Electric Strength *(IEC 60893-2/6.1)*	Condition A	kV/mm	20		
Insulation Resistance *(IEC 60893-2/6.3)*	Condition E-24/50; D-24/23	MΩ	2.40E+09 2.02E+09	7.25E+08 1.50E+09	1.95E+08 4.63E+08

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".

To assure the material's performance is adequate for a specific application; customers should verify, independent of Norplex-Micarta, performance characteristics of interest.

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 available.

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