

# RT193PM

## TECHNICAL DATA BULLETIN

**GRADE:** RT193PM

**NEMA GRADE:** --

**U. L. LISTED:** N

**DESCRIPTION:** RT193PM's substrate is composed of a hybrid aramid material that is stronger than pure aramid. The material is impregnated with a high temperature phenolic resin system which includes a non-conducting solid lubricant. This solid lubricant facilitates the use of RT193PM as a bearing material or in other wear applications.

### TYPICAL PROPERTIES

|                                    | UNITS   | VALUE <sup>1</sup>        |               |
|------------------------------------|---------|---------------------------|---------------|
|                                    |         | Specimen Tested (ID x OD) |               |
|                                    |         | 2.00" x 3.50"             | 3.00" x 4.50" |
| <b>GENERAL PHYSICAL PROPERTIES</b> |         |                           |               |
| Specific Gravity                   | -       | 1.34                      | 1.35          |
| Rockwell Hardness                  | M Scale | 70                        | 70            |
| Moisture Absorption                | %       | 1.1                       | 1.1           |
| Flexural Strength                  | psi     |                           | 11,000        |
| Flexural Modulus                   | kpsi    |                           | 750           |
| Flexural Strength (ISSC)           | psi     |                           | 8,700         |
| Flexural Modulus (ISSC)            | kpsi    |                           | 500           |
| Tensile Strength                   | psi     | 5,500                     | 7,400         |
| Compressive Strength (axial)       | psi     | 20,000                    |               |
| Compressive Modulus (axial)        | kpsi    | 600                       |               |
| Compressive Strength (radial)      | psi     |                           | 30,000        |
| Compressive Modulus (radial)       | kpsi    |                           | 440           |

|  | UNITS | VALUE <sup>1</sup>        |                       |
|--|-------|---------------------------|-----------------------|
|  |       | Specimen Tested (ID x OD) |                       |
|  |       | 2.00" x 3.50"             | 3.00" x 4.50"         |
| <b>THERMAL &amp; ELECTRICAL PROPERTIES</b>     |       |                           |                       |
| Temperature Index      Electrical / Mechanical | °C    | -- / 165 <sup>2</sup>     | -- / 165 <sup>2</sup> |

<sup>1</sup> All testing per ASTM D-348 unless otherwise noted.

<sup>2</sup> 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.

The data presented, while believed to be accurate and representative of the material's characteristics, was compiled from a limited number totally independent tests using reliable analytical test methods. It is being provided for informational purposes only. We acknowledge that a larger data population may produce different results but have no means to predict what they may be. 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](http://www.norplex-micarta.com), to determine if information is most current.

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