## Ferotec Friction, Inc.

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## PRODUCT DATA SHEET

## FRICTION MATERIAL COMPOSITE: D9703

PRODUCT DESCRIPTION: D9703 is a medium-high to high coefficient, rigid friction composite supplied as segments or formed shapes.

APPLICATION: D9703 possesses excellent fade resistance and friction level stability, making it a good choice for industrial and off-road applications.

| PHYSICAL PROPERTIES |  |  |
| :---: | :---: | :---: |
| Available Sizes (1) |  |  |
| Width, inches |  | 28 Max. |
| Thickness, inches |  | 0.187 to 1.500 |
| Length, inches |  | 36 Max. |
| Specific Gravity | SAE J380 | 1.95 |
| Apparent Density, pounds/in ${ }^{3}$ |  | 0.070 |
| Hardness, Gogan | SAE J379 | $37 \pm 5$ |
| (1) Special sizes available on request |  |  |
| MECHANICAL PROPERTIES |  |  |
| Tensile Strength, psi | ASTM D638 | 2600 |
| Modulus $\times 10^{6}$, psi |  | 1.27 |
| Elongation, \% |  | 0.27 |
| Flexural Strength, psi | ASTM D790 | 6500 |
| Modulus $\times 10^{6}$, psi |  | 0.95 |
| Compression Strength, psi | ASTM D695 | 11500 |
| Shear Strength, psi | ASTM D732 | 4600 |
| THERMAL PROPERTIES |  |  |
| Conductivity, BTU-in/hr/ft $/{ }^{2} \mathrm{~F}$ | ASTM D2214 | TBD |
| Specific Heat, Cal/gm/ ${ }^{\circ} \mathrm{C}$ | ASTM C351 | TBD |

FRICTION PROPERTIES

| Coefficient of Friction (2) | SAE J661 |  |
| :---: | :---: | :---: |
| Normal |  | . 46 |
| Hot |  | . 46 |
| @ 400 ${ }^{\circ} \mathrm{F}$ |  | . 46 |
| Static @ $200^{\circ} \mathrm{F}$ |  | . 56 |
| @ 400 ${ }^{\circ} \mathrm{F}$ |  | . 47 |
| Wear Rate, in ${ }^{3} / \mathrm{hp}$-hr |  | 0.0064 |
| Friction Code | SAE J866 | FF - GG |
| Recommended Operating Limits (3) |  |  |
| Maximum Unit Pressure, psi |  | 250 |
| Maximum Rubbing Speed, ft/min |  | 5000 |
| Temperature, ${ }^{\circ} \mathrm{F}$ |  |  |
| Minimum |  | -10 |
| Maximum (Intermittent) |  | 650 |
| Maximum (Continuous) |  | 550 |
| (2) Data derived from SAE J661a dynamometer test results. |  |  |
| (3) Recommended operating limits are commensurate with a reasonable amount of wear and uniform performance. |  |  |



NA = not available
N/A = not applicable
NR = not recommended
TBD = to be determined
The information and data supplied in this data sheet are believed to be accurate and reliable, and were obtained from standard laboratory tests. Since actual conditions of use are not within the control of FDL-USA, it is suggested that D9703 be thoroughly tested and its suitability for use be determined before final acceptance.

