

# Ceramic Textiles & Composites

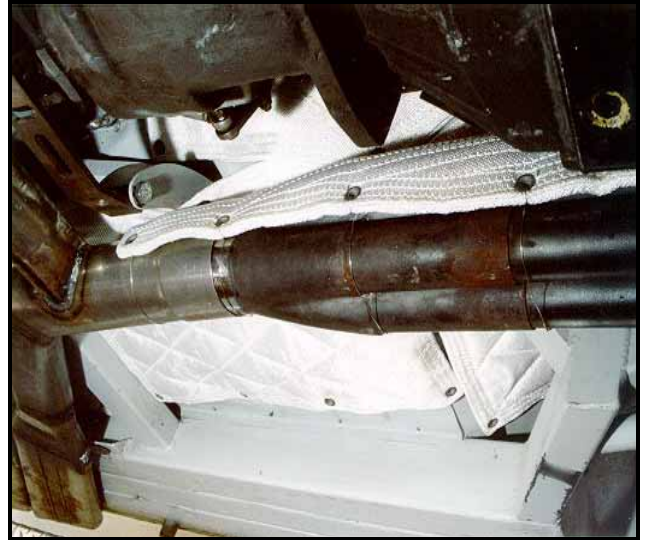
*Announcing:*

## 3M™ Nextel™ Thermal Barriers

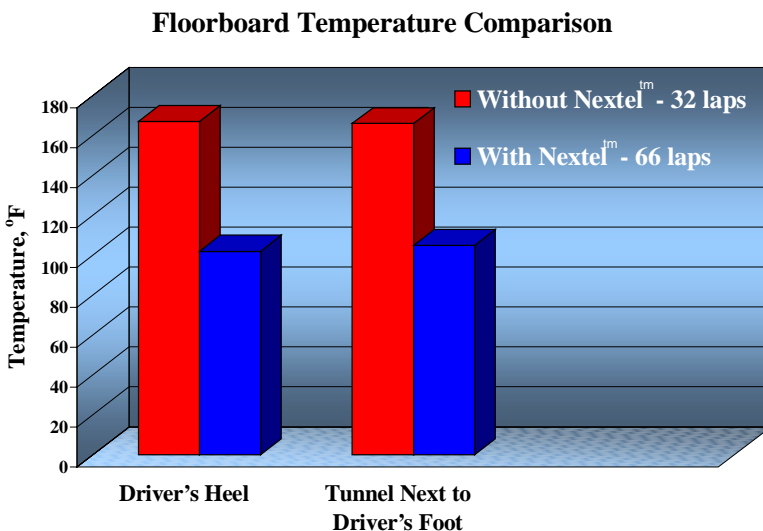
Introducing new 3M Nextel Thermal Barriers for auto and truck racing engineered from 3M advanced ceramic textile technology. Key product features, such as flexibility and insulation performance even at ultra-high temperatures, led Nextel ceramic textiles into commercial aerospace, outerspace and industrial furnace applications. Those same performance features now demonstrate benefits in the brutal race car environment where high temperature and flames can take their toll.

Nextel thermal barriers are fabricated from Nextel ceramic textiles and other materials that significantly reduce the heat transfer from the engine, exhaust and track surface into the driver's compartment.

Unlike some glass and aramids which weaken, shrink and embrittle above 1200°F (650°C), Nextel ceramic textiles continue to perform at temperatures exceeding 2000°F (1100°C), far above the measured temperature of metal exhaust components.



Track tests and driver feedback both agree that Nextel thermal barriers, placed around the exhaust system and under the floorboard, provide measurable benefits.



### Why use Nextel thermal barriers?

1. *Reduced driver fatigue*
2. *Reduced propensity to driver burns*
3. *Flame barrier*
4. *Cooler car interior*
5. *Retains strength at >2000 °F (1100 °C)*
6. *Flexible blanket*
7. *Conforms to shapes*
8. *Durable*
9. *Heat cleanable*

Nextel™ Ceramic Textiles offer fabrication flexibility. Manufactured into fabrics, sewing threads, woven tapes and braided sleeveings, the products are readily converted into conformable, functional parts to meet the needs of stringent, high temperature applications.

For example, our braided sleeveings readily conform around spark plug wire boots that protect and reduce heat fatigue.



### ***Applications for Braided Sleeveings***

- *Spark plug wire boots*
- *Heater wire insulation*
- *Thermocouple insulation*
- *Hose protection*
- *Cable and insulation ties*
- *Fire zone cable protection*
- *Electrical insulation*

Contact 3M Ceramic Textiles and Composites for help with your heat management problems. You can contact our customer service department toll-free at 877-992-7749, technical service at 651-736-7108, or our web site at [www.mmm.com/ceramics](http://www.mmm.com/ceramics). Ask about our ready made exhaust heat shields and our spark plug wire boots. You will be glad you did.

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#### **Important Notice to Purchaser:**

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