

# DUPONT™ NOMEX® NANO FLEX

## Game-changing barrier protection



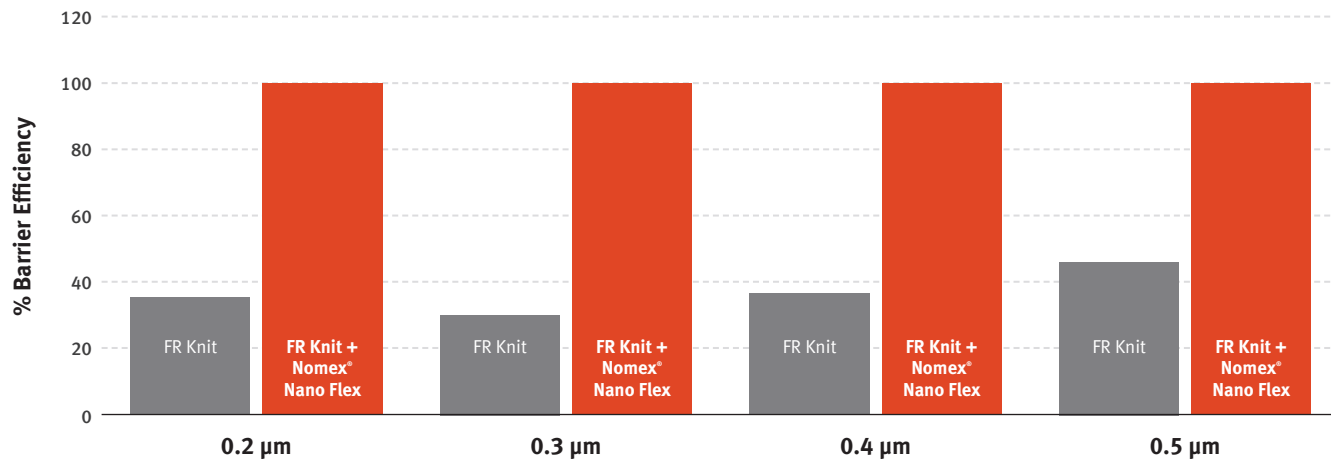
What if a new technology could provide superior particle barrier protection while offering breathability, and was such a lightweight, flexible solution that you hardly knew it was there? Introducing NEW DuPont™ Nomex® Nano Flex—the latest breakthrough in barrier protection for firefighter hoods.

Based on the Nomex® brand that has been trusted by firefighters around the world for more than 50 years, Nomex® Nano Flex was developed to help make products like firefighter hoods more protective against particles without compromising comfort.

Nomex® Nano Flex is a highly breathable, flame-resistant (FR) material with exceptional elasticity and superior particle barrier performance. It is thinner and lighter weight than other FR materials.

The addition of Nomex® Nano Flex to a firefighter hood composite structure provides improved particle barrier protection in the neckline and upper jaw area that historically are known to be the most vulnerable and least protected. In fact, it results in up to a 4X increase in particle barrier efficiency.

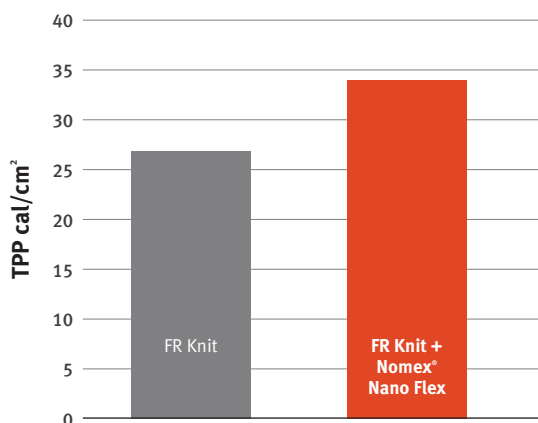
DuPont™ Nomex® Nano Flex Helps Improve Barrier Efficiency\* up to 4X



\*ASTM F2299-2010 Test Method

What's more, the combination of Nomex® Nano Flex and an FR knit material in a firefighter hood results in a 25% improvement in thermal protection performance (TPP) compared to an FR knit material alone.

### DuPont™ Nomex® Nano Flex Helps Improve TPP\* by 25%



\*NFPA 1971 Standard

The bottom line? Game-changing barrier protection is here—Nomex® Nano Flex.

### Typical Properties of DuPont™ Nomex® Nano Flex

Property*	Nomex® Nano
Basis Weight,	
oz/yd <sup>2</sup>	0.8
g/m <sup>2</sup>	26
Thickness,	
mil	9.7
micron	230
Barrier Efficiency (%)	>95% (<1.0 µm particle size)**
Total Heat Loss (THL)	
W/M <sup>2</sup>	350**
Thermal Protection Performance (TPP)	
cal/cm <sup>2</sup>	34**
Limiting Oxygen Index (LOI)	40
Laundry Durability (number of washes)	>25

\*Properties are nominal targets.

\*\*For hood composites made of 7 oz/yd<sup>2</sup> 100% Nomex®, Nomex® Nano Flex, 7 oz/yd<sup>2</sup> 100% Nomex®.

[nomex.com](http://nomex.com)

#### Disclaimer

This information is based upon technical data that DuPont believes to be reliable. It is subject to revision as additional knowledge and experience are gained. DuPont makes no guarantee of results and assumes no obligation or liability in connection with this information. It is intended for use by persons having technical skill for evaluation under their specific end-use conditions at their own discretion and risk. This information is not intended as a license to operate under or a recommendation to infringe any patent or technical information of DuPont or others covering any material or its use.

Copyright © 2017 DuPont. All rights reserved. The DuPont Oval Logo, DuPont™, NEVER QUIT™ and Nomex® are trademarks or registered trademarks of E.I. du Pont de Nemours and Company or its affiliates. K-29350 (08/17)



**Nomex**  
NEVER QUIT.™