



DuPont™ Nomex® Nano

Next Generation of Firefighter Protection

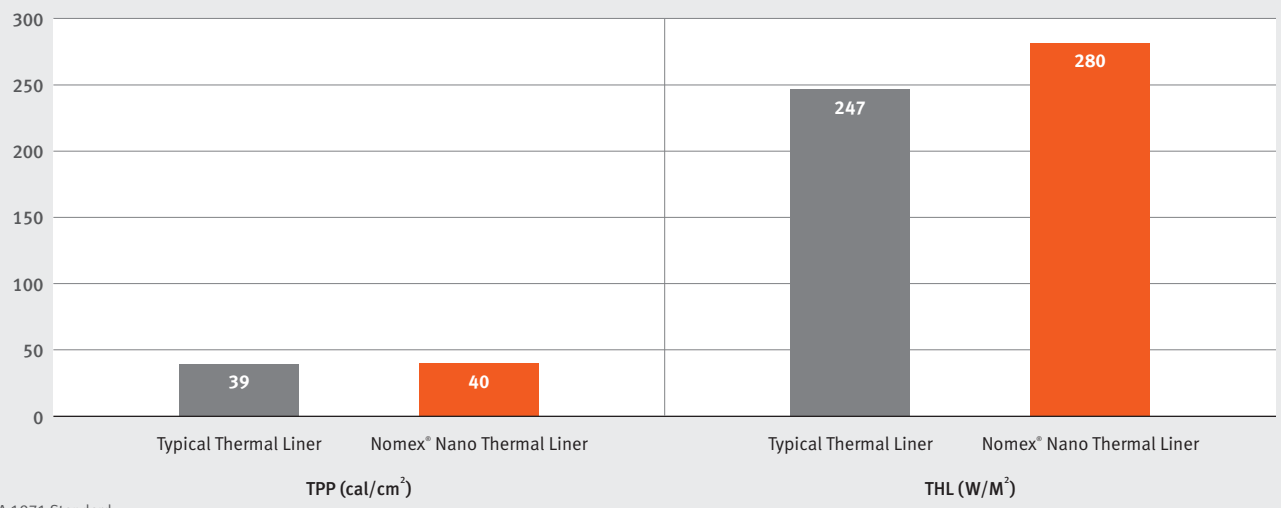
What if a new technology was introduced that could help reduce heat stress; decrease weight and bulk of your turnout gear; and help increase your mobility without compromising thermal protection? It's here—NEW DuPont™ Nomex® Nano.

Based on the Nomex® brand that has been trusted by firefighters around the world for more than 50 years, Nomex® Nano represents the next generation of flame-resistant (FR) solutions from DuPont. It was developed to address the growing problem of heat stress, which is now the cause of more firefighter injuries than any other single factor.

Nomex® Nano is specifically engineered to be thinner than other advanced FR materials used for thermal liners. In fact, Nomex® Nano may provide up to a 40% reduction in thermal liner thickness compared to other advanced liners available today, while providing similar thermal protection performance (TPP).

That means a thermal liner of Nomex® Nano may reduce the weight and bulk of current turnout gear systems, helping to give firefighters increased mobility and better range of motion. What's more, Nomex® Nano features improved total heat loss (THL) compared to typical thermal liners with similar TPP, which helps reduce heat stress.

DuPont™ Nomex® Nano Features Improved THL with Similar TPP*



*NFPA 1971 Standard



Another way that Nomex® Nano can help reduce heat stress is due to its superior moisture management. In laboratory tests comparing moisture absorption, the thermal liner made of Nomex® Nano showed approximately 30% more absorption capacity compared to conventional thermal liners—with equivalent drying rates.

The bottom line? The next generation of firefighter protection is here—Nomex® Nano.

Typical Properties of DuPont™ Nomex® Nano	
Property*	Nomex® Nano
Basis Weight, oz/yd ² g/m ²	0.6 20
Thickness, mil micron	5.9 150
Air Permeability, cfm m ³ /m ² /min	21 6.4
Total Heat Loss (THL) W/M ²	280**
Thermal Protection Performance (TPP) cal/cm ²	40**
Limiting Oxygen Index (LOI)	40
Laundry Durability (number of washes)	>25

*Properties are nominal targets.

**For turnout gear (TOG) composites made of Gemini® outer shell, CROSSTECH® black moisture barrier and thermal liner made with Glide™ face cloth/ Nomex® Nano/ Nomex® E89.

Visit Nomex.com to learn more.

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