THE INSIDE STORY ON DUPONT INNOVATIONS

Kevlar.
Nomex.
**PREMIUM PERFORMANCE IN ALL COMPONENTS**

When you demand turnout gear that protects against intense heat and flame, fatigue and heat stress, not to mention gear that’s tough and durable yet comfortable and breathable, you need to know about thermal technologies from DuPont. And you’ll find them in each distinct layer of your turnout.

The fact is DuPont materials have been a leading choice in the fire service market for over 40 years. It all began with the material firefighters ask for by name, DuPont® Nomex®. But the innovation continues. Our scientists and engineers participate in committees like the NFPA to help create the standards. We’re also developing new solutions like Nomex®, On Demand™, the material that automatically activates at 250° to give you increased thermal performance when you need it most.

**EXCEPTIONAL PERFORMANCE THROUGHOUT YOUR ENSEMBLE**

Today, you’re called on to do more than ever. So your turnout system must be light and flexible enough to work a vehicle accident, ventilate a roof or drag a hose line. But when you’re fighting a fire, your first and last line of defense is your protective ensemble.

That’s why turnout gear made with DuPont technologies combines the proven thermal protection of DuPont® Nomex® with the durability and toughness of DuPont® Kevlar® — the fiber that’s five times stronger than steel on an equal weight basis. All to give you gear that delivers superior performance under routine, ordinary and extreme conditions.

**BE DUPONT READY.**

**DUPONT INNOVATION:**

**THE INSIDE STORY ON YOUR TURNOUT COAT**

More than 70% of your ensemble’s thermal protection comes from inner components. So, regardless of the composition of your outer shell, DuPont® Nomex® and Kevlar® are working hard on the inside to help protect you against burn injuries from high temperatures, compression, contact, and even flash over conditions. But the same garment that protects you from heat also helps prevent the release of metabolic heat that can contribute to heat stress.

![Image of turnout coat](image)

**THERMAL LINERS**

provide the majority of your turnout system’s thermal protection. Nomex® and Kevlar® fiber batts and Nomex® E89™ non-wovens combined with Nomex® fiber and filament face cloths provide durable, flexible, heat-insulating components. Multi-layer Nomex® E89™ based thermal liners are among the thinnest, most flexible and breathable available. Face cloths with Nomex® help reduce surface friction, improving overall garment mobility. And liner water wicking or repellant finishes improve moisture management and reduce drying time. New, revolutionary Nomex® On Demand™ thermal liner technology automatically activates at 250°, improving the thermal insulation value of your gear.

**MOISTURE BARRIERS**

made with Nomex® fabrics and Nomex® E89™ — the choice of the trusted moisture barrier manufacturers — provide strong flame resistant substrates for liquid impermeable films. The moisture barrier helps protect against the intrusion of water, chemicals and viral agents. Yet these barriers are also breathable, to help reduce overall heat stress during strenuous activities.

**OUTER SHELLS**

constructed with Nomex® and Kevlar® fibers and filament yarns are engineered together to form materials that stand up to heat, stay strong and protect the inner components. Kevlar® filament is used in premium fabrics to reduce fabric profile while achieving higher strength. Durable DuPont® Tychem® E89® HT treatments help keep the gear lighter and prevent water from compromis-

**THE FIRST CHOICE FOR ALL YOUR PROTECTION NEEDS**

Whether thermal protection, durability, mobility, comfort, or decreased bulk, weight and heat stress are your priority, DuPont is committed to delivering an entire system designed to meet your exact performance requirements. DuPont materials are also protecting professionals even when the fire is out. Nomex® Stationwear is durable, comfortable and NFPA 1975: DuPont® Tychem® chemical protective garments are helping keep first responders safe. And HAZMAT teams turn to DuPont® Tychem® ThermonPro for a single-layer garment that helps protect against the dual hazards of flash fires and chemicals.

**TO LEARN MORE ABOUT DUPONT™ NOMEX® AND KEVLAR® OR FOR A COMPLETE LIST OF PREFERRED LICENSEES WHO MANUFACTURE COMPONENTS AND GEAR MADE WITH DUPONT TECHNOLOGY, VISIT WWW.PERSONALPROTECTION.DUPONT.COM OR CALL 1-800-931-3456.**

**COMPONENTS IN ALL LAYERS INCLUDE DUPONT™ NOMEX® AND KEVLAR®, NOMEX® E-89® OR NOMEX® ON DEMAND™**

**THERMAL LINER MATERIAL:**

*Nomex® On Demand™ And Nomex® E-89® Technologies*

**MOISTURE BARRIER MATERIAL:**

*Nomex® E-89® Technology*

**OUTER SHELL MATERIAL:**

*Nomex® And Kevlar® Fibers And Filaments*

Look for DuPont products on your inside label and on your product hangtag.

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