

**DUPONT  
NOMEX® MHP**

# Durable, Comfortable, Multihazard Protection



**Nomex**  
NEVER QUIT.™

For more than 50 years, DuPont™ Nomex® has been committed to developing the latest innovations in flame-resistant (FR) protection. Nomex® MHP is a fabric engineered specifically to protect from heat and flame; electric arc; and molten metal splash. Garments made with Nomex® MHP are extremely durable and lightweight, plus they provide optimal moisture management for enhanced comfort. It's time to discover the difference fabric made with Nomex® MHP can make.

## Advantages of Nomex® MHP

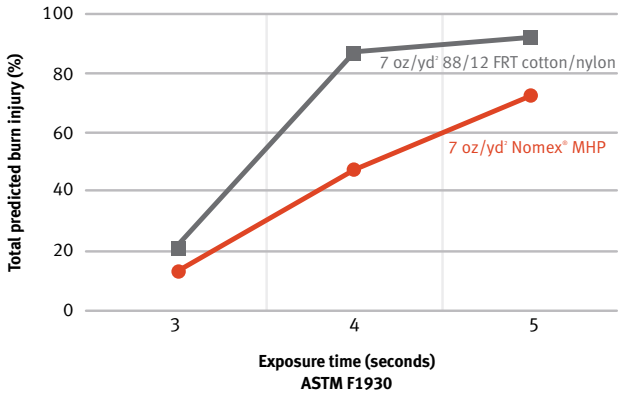
- Provides multihazard protection with the proven heat and flame protection of Nomex® fabric plus Category 2 arc flash and small molten metal splash protection that cannot be washed out or worn away.
- Designed to absorb moisture, Nomex® MHP dries faster than flame-retardant-treated (FRT) cotton for a more comfortable feel.
- Tough and durable, garments made of Nomex® MHP have high abrasion and tear resistance, providing a long-lasting professional look.
- Available in a wide selection of colors, garments made with Nomex® MHP can last three times longer than other FR garments made of weaker fibers.
- Available in 7.0 oz/yd<sup>2</sup> twill fabrics in a range of colors: royal blue, navy blue, medium blue, khaki, medium gray and red.
- Garments made of Nomex® MHP 7.0 oz/yd<sup>2</sup> have been third-party certified to NFPA 2112 Standard on Flame-resistant Clothing for Protection of Industrial Personnel Against Short-Duration Thermal Exposures from Fire.
- 7.0 oz/yd<sup>2</sup> fabric has an arc rating of **ATPV = 8.4 cal/cm<sup>2</sup>** (Category 2) tested to standard ASTM F1959/F1959M-14e1.
- Meets EN ISO 11611, the international welding standard, protecting against small molten metal splashes from TIG welding, gas welding and spot welding.

## Typical Physical Properties

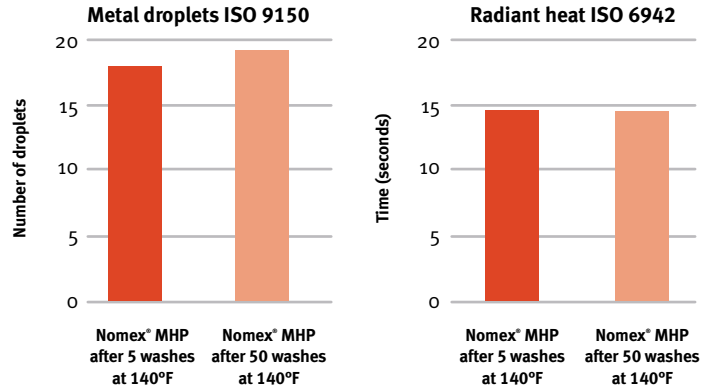
Property	Standard	Units/Description	Nomex® MHP
Basis weight	ASTM D3776	oz/yd <sup>2</sup>	7.0
Tensile strength (Grab test)	ASTM D5034	Warp (lbf) Fill (lbf)	153 111
Elmendorf tear	ASTM D1424	Warp (lbf) Fill (lbf)	9.9 7.9
Vertical flame	ASTM D6413	Afterflame (seconds) Char length (inches) Melting or dripping	<2 <4 No
Thermal protective performance (TPP)	NFPA 1971 Section 8.7	Spaced (cal/cm <sup>2</sup> ) Contact (cal/cm <sup>2</sup> )	11.8 7.9
Dimensional stability (shrinkage) after 5 home laundry cycles	AATCC 135	Warp (%) Fill (%)	<3 <3
Thermal shrinkage (oven test)	NFPA 2112 Section 8.4	Warp (%) Fill (%)	<5 <5
Total predicted burn injury	ASTM F1930	Percent (%)	16

# Nomex® MHP provides industry-leading performance in multihazard protection

Reliable protection against unpredictable fires

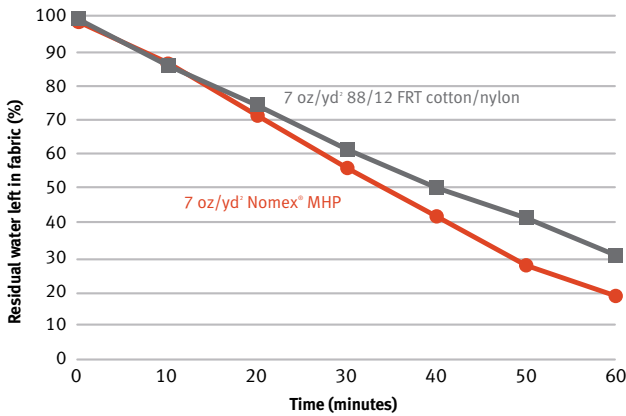


Long-lasting protection and Class 1 rating for small molten metal splash

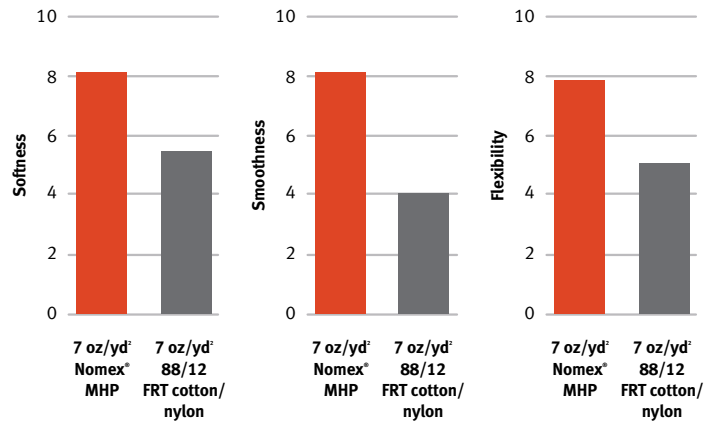


## Nomex® MHP received the highest overall comfort ratings in a third-party study

Moisture management



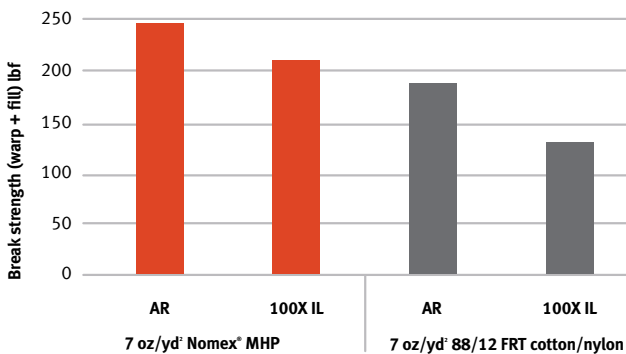
Overall comfort measured on a scale of 1–10



Third-party sensory analysis based on ISO 13299 and ISO 11035

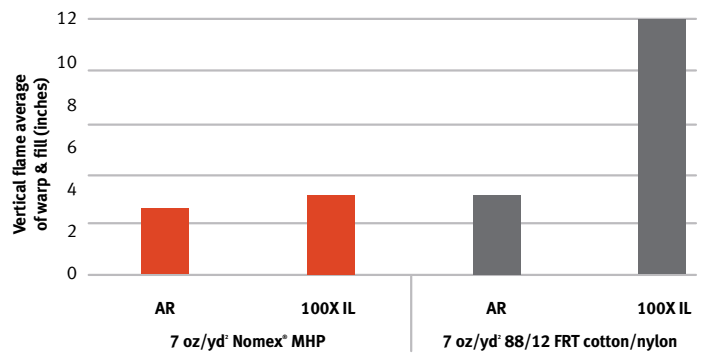
## Nomex® MHP provides highly durable, longer-lasting garments

A stronger fabric for a longer lifespan



ASTM D5034, fabric as received (AR) and after 100 industrial laundry (IL) cycles

Inherent FR protection that cannot be washed out or worn away



ASTM D6413, fabric as received (AR) and after 100 industrial laundry (IL) cycles

## Color Fastness

Fabrics made with Nomex® MHP are available in many colors. Due to the color change of fibers after extended exposure to ultraviolet (UV) light, not all colors may be appropriate for all applications. The FR properties of the fabrics are not affected by UV exposure. The change in color will vary according to the color chosen. If the fabrics will be subjected to significant amounts of UV light exposure (sunlight or artificial), it may be desirable to select lighter colors less likely to be affected. Garments made of Nomex® MHP should be stored so that they are protected from unnecessary exposure to UV light.

## Recommended USE and CARE for fabrics made with DuPont™ Nomex® MHP

Single-layer fabrics made of Nomex® MHP are not suitable for protection against hot liquids or steam. Do not wear alone for structural or proximity firefighting. Do not use for chemical protection. Follow all warning, use and care instructions included in the garment manufacturer's label.

Flammable contaminants will reduce the thermal protection of any FR fabrics and the garments made from them. Wash all garments with fabrics made of Nomex® MHP frequently to ensure that no grease, oil, soil or other flammable contaminants are present when the garment is worn.

## For Home Laundering

- Wash new garments before wearing to remove fabric processing aids and finishes.
- Launder garments separately from non-flame-resistant clothing so FR garments are not contaminated with flammable lint.
- Wash dark and light colors separately.
- Secure all zippers and snaps before washing and drying.
- Pretreat stains.
- Machine-wash in hot water (maximum 140°F/60°C) with a heavy-duty liquid detergent.
- Do not use chlorine bleach or detergents containing chlorine bleach because these can cause color fading. Only oxygen-based bleach should be used on clothing made of Nomex®.
- Tumble-dry on low heat (maximum 160°F/71°C).
- Do not over-dry. Remove promptly to minimize wrinkles.
- Do not use fabric softeners or dryer sheets. Other laundry additives should not be used if they are flammable.
- Removal of grease or oil stains may require dry cleaning.
- Do not store or line-dry fabrics or garments made of Nomex® in sunlight.

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

Product safety information is available upon request.

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