## **DuPont™ Nomex®**

## LIGHTWEIGHT COMFORT IN INHERENTLY FLAME-RESISTANT FABRIC

## LIGHTWEIGHT AND COMFORTABLE PROTECTION FOR GARMENTS



Ultrasoft® FRT Cotton/Nylon Size 44R ASTM F1930 Garment Weight 1.75 lb (796 g) Specified Fabric Weight 7.0 oz/yd² (Actual Fabric Weight 8.1 oz/yd²) Nomex® IIIA Size 44R ASTM F1930 Garment Weight 1.0 lb (457 g) Specified Fabric Weight 4.5 oz/yd² (Actual Fabric Weight 4.7 oz/yd²)

DuPont™ Nomex® brand fiber helps manufacturers of garments offer the lightweight, comfortable protection your workers are looking for. Nomex® helps provide outstanding flame resistance, but that's not all. Fabrics made of Nomex® are also very strong and extremely durable, especially when compared to other materials such as flame-retardant-treated (FRT) cotton fabrics. As a result, garments can be made from lighter-weight fabric of Nomex® for increased comfort and breathability.

For example, coveralls of Nomex® generally made from fabrics with manufacturers' specified weights as low as 4.5 oz/yd² still meet applicable industrial standards. The lightest weight Ultrasoft® fabric has to weigh 7 oz. to meet NFPA 2112. The garment made of Ultrasoft® is almost one pound heavier than the garment made of Nomex®.

Cotton is typically thought of as a comfortable fabric. However, heavier, chemically treated FRT cotton garments are not the same as your everyday cotton clothing. Chemical additives, which account for as much as 20% of the weight of the fabric, make the garment heavier than garments made of Nomex® IIIA fabric.

Table 1 shows the difference in weight for comparable commercially available fabrics of DuPont™ Nomex® and FRT cotton. *The actual weight of fabrics often differs from the manufacturers' specified weight.* 

The built-in flame resistance of Nomex® fabric is not only inherent, but it helps manufacturers provide a lighter-weight, more comfortable garment, as well. Nomex® fabric can help give your workers lightweight comfort and outstanding protection.

Table 1. Actual vs. Specified Weight Comparisons for NFPA 2112 Certified Fabrics

	Specified Fabric Weight oz/yd²	Actual Fabric Weight oz/yd²	Actual Weight Difference %	Air Permeation cfm/ft²
Nomex® IIIA	4.5	4.7	4	224
	6.0	6.2	3	84
	7.0	7.3	4	29
Ultrasoft® FRT Cotton/Nylon	7.0	8.1	16	31

## **Customer Service:**

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