

Nomex[®] Essential

Nomex[®] Essential is engineered to provide workers in the industrial manufacturing and transportation industries valuable escape time and protection against intense heat and flames from on-the-job hazards.

Nomex[®] Essential delivers highly durable and lightweight protection.

Protection



Better protection at longer exposures and higher temperatures



Inherent heat and flame resistance



Inherent protection; can't be washed out or worn away



Resists tears and abrasion



Helps provide valuable escape time



Extremely durable and long-lasting protective solutions

Color

Refer to fabric sample for true color representation.



Navy



Royal blue



Red



Khaki

Weight

4.5 oz/yd² / 153 g/m²
6 oz/yd² / 203 g/m²

Fiber blend

Nomex[®], Kevlar[®], antistatic fiber

Hazards



Short-duration thermal exposure



Hot working conditions



Combustible dust



Arc flash



Static electricity*

*Static dissipation does not replace proper grounding in a potential Electro-Static Discharge (ESD) hazard.

Certifications

Nomex[®] fabric solutions are certified to meet the listed standards.*

ASTM F1506

NFPA 2112

CGSB 155.20

ISO 11612

IEC 61482-2

EN 1149

*Certifications for the fabrics vary by region. Contact a DuPont representative for additional details.

Nomex® Essential

Typical physical properties (ASTM, NFPA)

Property	Standard	Units/description	Nomex® Essential	Nomex® Essential
Basis weight	ASTM D3776	oz/yd ²	6.0	4.5
Tensile strength (Grab test)	ASTM D5034	Warp (lbf) Weft (lbf)	225 161	141 104
Elmendorf tear	ASTM D1424	Warp (lbf) Weft (lbf)	16 10	11 8
Heat transfer performance (HTP)	NFPA 2112 Section 8.2	Spaced (cal/cm ²) Contact (cal/cm ²)	13 6	12 6
Dimensional stability after 5 cycles	AATCC 135	Warp (%) Weft (%)	<3 <3	<3 <3

Typical physical properties (ISO, EN)

Property	Standard	Units/description	Nomex® Essential	Nomex® Essential
Basis weight	ISO 3801	g/m ²	203	153
Tensile strength	ISO 13934-1	Warp (N) Weft (N)	1126 868	871 604
Tear strength	ISO 13937-2	Warp (N) Weft (N)	26 30	22 26
Dimensional stability	ISO 5077	Warp (%) Weft (%)	+/- 3 +/- 3	+/- 3 +/- 3

Fabric protection performance

Property	Standard	Units/description	Nomex® Essential 6.0 oz/yd ² 203 g/m ²	Nomex® Essential 4.5 oz/yd ² 153 g/m ²
Arc rating	ASTM F1959 IEC 61482-1-1	cal/cm ²	>4 (5.7)	>4 (4.6)
Thermal manikin	NFPA 2112	TPBI (%)	20	38



For more information on Nomex® Essential including pilling, colorfastness, and use and care, visit nomex.com/fabrics

DuPont Personal Protection
 @DuPontPPE

Product safety information is available upon request. All data are from certification tests. Data can vary among testing labs.

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