

# Nomex<sup>®</sup> Essential

Nomex<sup>®</sup> Essential is engineered to provide workers in the oil & gas and petrochemical industries valuable escape time and protection from intense heat and flames from on-the-job thermal hazards.

Nomex<sup>®</sup> Essential delivers highly durable and lightweight protection.

## Extreme protection



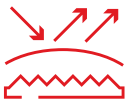
Better protection at longer exposures and higher temperatures



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

## Hazards



Flash fire



Extreme heat



Static electricity\*



Arc flash

## Color

Refer to fabric sample for true color representation.



Navy



Royal blue



Red



Khaki

## Weight

4.5 oz/yd<sup>2</sup> / 153 g/m<sup>2</sup>

6 oz/yd<sup>2</sup> / 203 g/m<sup>2</sup>

## Fiber blend

Nomex<sup>®</sup>, Kevlar<sup>®</sup>, antistatic fiber

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

## Certifications

Nomex<sup>®</sup> 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.

## Typical physical properties (ASTM, NFPA)

Property	Standard	Units/description	Nomex® Essential	Nomex® Essential
Basis weight	ASTM D3776	oz/yd <sup>2</sup>	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 <sup>2</sup> ) Contact (cal/cm <sup>2</sup> )	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 <sup>2</sup>	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 <sup>2</sup> 203 g/m <sup>2</sup>	Nomex® Essential 4.5 oz/yd <sup>2</sup> 153 g/m <sup>2</sup>
Arc rating	ASTM F1959 IEC 61482-1-1	cal/cm <sup>2</sup>	>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](http://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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