

# Nomex<sup>®</sup> Essential

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

## Protection



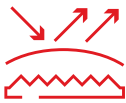
Better protection at longer exposures and higher temperatures



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

## Hazards



Short-duration thermal exposure



Hot working conditions



Combustible dust



Arc flash



Static electricity\*

## 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.

# Nomex® Essential

## 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.

This information corresponds to our current knowledge on the subject. It is offered solely to provide possible suggestions for your own experimentations. It is not intended, however, to substitute for any testing you may need to conduct to determine for yourself the suitability of our products for your particular purposes. This information may be subject to revision as new knowledge and experience becomes available. Since we cannot anticipate all variations in actual end-use conditions, DUPONT MAKES NO WARRANTIES AND ASSUMES NO LIABILITY IN CONNECTION WITH ANY USE OF THIS INFORMATION. Nothing in this publication is to be considered as a license to operate under or a recommendation to infringe any patent right.

DuPont™, the DuPont Oval Logo, and all trademarks and service marks denoted with ™, ® or ® are owned by affiliates of DuPont de Nemours, Inc. unless otherwise noted. © 2019 DuPont. MT-1010-NA (10/19)