Personal protective solutions for utilities industry applications
Because everyone has someone depending on them to get home safely

DuPont is more focused than ever on providing innovative protection solutions and expert technical support, tailored to meet the specific needs of electricians and workers in the utilities industry around the world.

Because their safety is our business, electricians and workers in the utilities industry can rely on the world-class people, products and innovation that have made DuPont a trusted partner in personal protection.

With a wide range of industry-leading personal protective equipment (PPE) solutions and a global network of PPE specialists, technical experts and manufacturing, DuPont is uniquely suited to provide the protection and comfort every worker deserves to help them face a range of workplace hazards with confidence.

Our brands

Nomex®
DuPont™ Nomex® offers a tested and proven portfolio of protective solutions that continues to meet or exceed global standards for heat, flame and electric arc flash protection.*

Kevlar®
Gloves made with DuPont™ Kevlar® offer industry-leading cut protection, built-in heat and flame resistance and electric arc flash protection, while providing the dexterity and comfort workers want.

Tyvek®
DuPont™ Tyvek® garments provide an ideal balance of protection, durability and comfort combined with an inherent barrier against particles down to 1.0 micron in size.

Tychem®
DuPont™ Tychem® garments deliver durable protection and offer strong permeation barrier against a wide range of chemicals. Together with Tychem® accessories, they create the Tychem® Trusted Chemical System™ for complete protection.

ProShield®
DuPont™ ProShield® garments offer protection against dirt and grime during light-duty work, while providing a high level of comfort.

*For high arc-rated solutions, visit dpp.dupont.com for available Nomex® layering systems.
Workers in the utilities industry face many on-the-job hazards. According to the U.S. Occupational Safety and Health Administration (OSHA) Severity Index from January 2015 through September 2019, within subcategories of other injuries, most injuries in the utilities industry were related to fractures and amputations. Approximately 32% were heat (thermal) burns; 26% were cuts and lacerations; and nearly 5% were chemical burns and corrosions. In total, body and hands represent 71.14% of the body parts that are most often injured.

Providing workers with the protection they need for the hazards they face is a major responsibility. DuPont Personal Protection has the in-depth knowledge, unparalleled expertise and broad portfolio of PPE solutions to help keep your workers safe.

To help you in the decision-making process, from risk assessment through implementation, we recommend using the 4P methodology:

- **Predict**: Analyze all activities required for each part of your operation. Identify all potential risks associated with each activity. Understand severity and likelihood of risks.
- **Provide**: Document PPE selected to address each residual risk. Build awareness with workers about their specific risks and selected PPE. Train workers on correct use of PPE.
- **Protect**: Select appropriate PPE to address residual risks. Ensure PPE meets performance and comfort requirements in the work environment. Remember, PPE is the last line of defense.
- **Prevent**: Evaluate ways to eliminate hazards. Make substitutions when possible. Reduce residual risks with engineering processes or operational changes.
Multiple workplace hazards in a dynamic work environment

Now more than ever, utility companies across the globe face increased competition, stricter regulations, limited government subsidies and social pressure for more clean energy sources.

To remain competitive, companies are upgrading to more efficient generation, transmission and distribution systems. These upgrades involve an important diversification of energy portfolio with a reduction in the single energy source from fossil fuels to different renewable sources.

As a result, workers in the utilities industry, who are responsible for providing electricity as an essential need for the world, are facing new and multiple workplace hazards in a very dynamic work environment. DuPont offers a broad range of PPE solutions to address these hazards, including: garments made with Nomex® for thermal and electric arc flash hazards; gloves made with Kevlar® for mechanical and multi-hazard protection; Tyvek® garments for protection against fine particle hazards and low level liquid splashes; Tychem® garments and accessories for protection against a wide range of chemicals; and ProShield® garments for protection against dirt and grime.
Generation
There are several relevant activities in the electric generation system, with a special focus on operation and maintenance in power plants and substations.

Tasks
- Operation and maintenance of power plants
- Servicing electrical panels
- Inspection/maintenance of electrical generators
- Maintenance of substation equipment

Hazards
- Heat
- Arc flash
- Cut
- Flash fire
- Dirt

Protection for every task

Available PPE options
For arc flash protection combined with inherent heat and flame protection:

- **Evolv** built with Nomex®
  This lightweight Nomex® blended fabric is CAT 2 arc-rated/flame-resistant (AR/FR) and NFPA 2112 compliant, providing workers with comfortable protection. Garments are available in men’s and women’s styles and sizes.

- **Nomex® Essential Arc**
  Nomex® Essential Arc is engineered to provide >8 cal/cm² arc thermal performance value (ATPV) protection combined with enhanced durability against abrasion. Nomex® is resistant to many chemicals and oil stains are washed out easier than with standard cotton garments.

- **FR face mask made with Nomex® Nano Flex**
  Made with Nomex® Nano Flex, this comfortable, high-performance particulate mask from PGI, Inc. may help meet guidance from the U.S. Centers for Disease Control and Prevention (CDC) for wearing masks in environments that require FR protection while social distancing. This mask offers exceptional particulate and aerosol protection and meets NFPA 70E® Category 4 with an ATPV of 46 cal/cm².

  *FR face masks are not considered as arc rated eye or face protection per ASTM F2178 and should not be substituted for arc flash eye or face protection prescribed by a site arc flash hazard assessment.

For a balance of multi-hazard hand protection against arc flash and cuts combined with enhanced dexterity:

- **Youngstown FR Ground Glove 12-3365-60**

  *ANSI A4
  ANSI/ISEA 105:2016
  Cut

For protection against dirt without compromising flame resistance or arc flash protection:

- **ProShield® 6 SFR**
  Providing a barrier against non-hazardous aerosols and particles, ProShield® 6 SFR is a cost-effective solution designed to help protect and preserve primary protective garments. ProShield® 6 SFR garments are designed to keep primary FR garments clean from things like dirt, dust and grime, while not contributing to additional burn injury when exposed to a flame source. This coverall should be worn on top of an FR garment, such as a garment made of Nomex® Comfort.

For a full list of PPE solutions, visit SafeSPEC™.
Available PPE options
For arc flash protection combined with inherent heat and flame protection:

**Evolv™ built with Nomex®**
This lightweight Nomex® blended fabric is CAT 2 ARI/FR and NFPA 2112 compliant, providing workers with comfortable protection. Garments are available in men's and women's styles and sizes.

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**Nomex® Essential Arc**
Nomex® Essential Arc is engineered to provide >8 cal/cm² ATPV protection combined with enhanced durability against abrasion. Nomex® is resistant to many chemicals and oil stains are washed out easier than with standard cotton garments.

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NOTE: Above compliance and certifications are for Nomex® Essential Arc fabric, please consult with garment manufacturer for garment certifications.

**Nomex® Comfort**
Nomex® Comfort is a lightweight, quick-drying innovative fabric that delivers extreme heat and flame protection, maximum comfort and excellent durability. Garments are available in men's and women's styles and sizes.

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NOTE: Above compliance and certifications are for Nomex® Comfort fabric, please consult with garment manufacturer for garment certifications.

**Nomex® Essential**
A highly durable protective solution that helps minimize break-open and provides excellent heat and flame protection.

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NOTE: Above compliance and certifications are for Nomex® Essential fabric, please consult with garment manufacturer for garment certifications.

**FR face mask made with Nomex® Nano Flex®**
Made with Nomex® Nano Flex, this comfortable, high-performance particulate mask from PGI, Inc. may help meet guidance from the U.S. CDC for wearing masks in environments that require FR protection while social distancing. This mask offers exceptional particulate and aerosol protection and meets NFPA 70E® Category 4 with an ATPV of >46 cal/cm².

*FR face masks are not considered as arc rated eye or face protection prescribed by the Code and may be used as a primary FR garment.

For chemical-resistant/flame-resistant (CR/FR) protection:

**Tychem® 400**
Tychem® 400 garments are composed of flashspun high-density polyethylene, which creates a unique, nonwoven material. Tychem® 400 fabric offers an inherent barrier against particles (down to 0.1 micron in size). Protection is built into the fabric itself; there are no films or laminates to abrade or wear away.

**Tychem® 500 HV**
Tychem® 500 HV garments are permeable to both air and water vapor yet repel water-based liquids and aerosols. They offer an excellent barrier against fine particles and fibers. Fluorescent orange with silver gray reflective material makes these garments highly visible during the day as well as at night (when exposed to a light source).

**Tyvek® 800**
Robust yet lightweight, Tyvek® 800 garments provide an effective barrier against many low-concentrated inorganic chemicals (even under pressure) and small-sized hazardous particulates, as well as oil repellency (ideal for cleaning operations with water pressure jets).

For a full list of PPE solutions, visit SafeSPEC™.
Transmission

There are several relevant activities in the transmission systems, with a special focus on the construction, operation and maintenance of transmission lines and substations.

Hazards
Heat
Electromagnetic field
Arc flash
Cuts
Dust

Tasks
Operation and maintenance of stream airline networks and substations
Job transmission lines maintenance

Available PPE options
For arc flash protection combined with inherent heat and flame protection:

**Evolv™ built with Nomex®**
This lightweight Nomex® blended fabric is CAT 2 AR/FR and NFPA 2112 compliant, providing workers with comfortable protection. Garments are available in men's and women's styles and sizes.

- Cat 1

**Nomex® Essential Arc**
Nomex® Essential Arc is engineered to provide >8 cal/cm² ATPV protection combined with enhanced durability against abrasion. Nomex® is resistant to many chemicals and oil stains are washed out easier than with standard cotton garments.

- Cat 2

**FR face mask made with Nomex® Nano Flex™**
Made with Nomex® Nano Flex, this comfortable, high-performance particulate mask from PGI, Inc. may help meet guidance from the U.S. CDC for wearing masks in environments that require FR protection while social distancing. This mask offers exceptional particulate and aerosol protection and meets NFPA 70E® Category 4 with an ATPV of 46 cal/cm².

*FR face masks are not considered as arc rated eye or face protection per ASTM F2178 and should not be substituted for arc flash eye or face protection prescribed by a site arc-flash hazard assessment.

**SHOWA 240®**
Lightweight and comfortable, these 13-gauge gloves lined with Kevlar® have a sponge neoprene palm coating. Flame-resistant Kevlar® fiber helps enable protection against arc flash up to level 2, according to open arc/box tests. Flat dipped sponge neoprene coating provides limited chemical hazard protection combined with enhanced grip. The anatomical design helps prevent hand fatigue.

Cat. II
EN 388:2016
EN 388:2013
EN 407:2004

- 1X13C
- 3X13
- 422UX

Arc rating

**Tychem® 2000 Tape**
Tychem® 2000 Tape helps hold a sleeve over a glove, a pant leg over a boot or a closure flap closed, while providing protection against a variety of inorganic acids and bases, as well as common industrial cleaning agents, such as bleach. The tape tears easily for quick and convenient application. Repositionable once applied, the tape’s elasticity enables tight adhesion to help prevent leaks.

*Tychem® 2000 Tape should not be used around heat, open flame, sparks or in potentially flammable environments. For professional use only.

**Tychem® 2000**
Tychem® 2000 is a lightweight and durable fabric that uses the strength of Tyvek® fabric and a polyethylene coating. Tychem® 2000 offers permeation barrier protection for at least 30 minutes against more than 40 chemical challenges.

**Tychem® 4000**
Tychem® 4000 provides effective protection against a range of chemical environments, offering at least 30 minutes of protection against more than 100 chemical challenges.

**Generation**

Tasks
Operation and maintenance of power plants
Fuel loading
Waste management

Hazards
Dirt/dust
Liquid chemical splash
Flash fire

For a full list of PPE solutions, visit SafeSPEC™.
Tasks
Operation and maintenance of stream airline networks and substations
Job transmission lines maintenance

Hazards
Heat
Electromagnetic field
Arc flash
Cuts
Dust

For protection against dirt without compromising flame resistance or arc flash protection:
ProShield® 6 SFR
Providing a barrier against non-hazardous aerosols and particles, ProShield® 6 SFR is a cost-effective solution designed to help protect and preserve primary protective garments. ProShield® 6 SFR garments are designed to keep primary FR garments clean from things like dirt, dust and grime, while not contributing to additional burn injury when exposed to a flame source. This coverall should be worn on top of an FR garment, such as a garment made of Nomex® Comfort.

For an ideal balance of protection, durability and comfort combined with an inherent barrier against fine particles and where an FR hazard is not present:
Tyvek® 400
Tyvek® 400 garments are composed of flashspun high-density polyethylene, which creates a unique, nonwoven material. Tyvek® 400 fabric offers an inherent barrier against particles (down to 1.0 micron in size). Protection is built into the fabric itself, there are no films or laminates to abrade or wear away.

For protection against heat and arc flash:
Nomex® Essential Arc
Nomex® Essential Arc is engineered to provide >8 cal/cm² ATPV protection combined with enhanced durability against abrasion. Nomex® is resistant to many chemicals and oil stains are washed out easier than with standard cotton garments.

NOTE: For additional high arc rated solutions, consult local flame retardant solution to address COVID-19 contamination concerns with high arc rated suits see currently available Nomex® layering systems.

FR face mask made with Nomex® Nano Flex™
Made with Nomex® Nano Flex, this comfortable, high-performance particulate mask from PGI, Inc. may help meet guidance from the U.S. CDC for wearing masks in environments that require FR protection while social distancing. This mask offers exceptional particulate and aerosol protection and meets NFPA 70E® Category 4 with an ATPV of 46 cal/cm².

*FR face masks are not considered as arc rated eye or face protection per ASTM F2178 and should not be substituted for arc flash eye or face protection prescribed by a site arc flash hazard assessment.

For light liquid chemical splash protection with arc flash and cut resistance:
SHOWA 240™
Lightweight and comfortable, these 13-gauge gloves lined with Kevlar® have a sponge neoprene palm coating. Flame resistant Kevlar® fiber helps enable protection against arc flash up to level 2, according to open arc/box tests. Flat dipped sponge neoprene coating provides limited chemical hazard protection combined with enhanced grip. The anatomical design helps prevent hand fatigue.

For a full list of PPE solutions, visit SafeSPEC™

Available PPE options
For arc flash protection combined with inherent heat and flame protection:
Evolv™ built with Nomex®
This lightweight Nomex® blended fabric is CAT 2 AR/FR and NFPA 2112 compliant, providing workers with comfortable protection. Garments are available in men’s and women’s styles and sizes.

Nomex® Essential Arc
Nomex® Essential Arc is engineered to provide >8 cal/cm² ATPV protection combined with enhanced durability against abrasion. Nomex® is resistant to many chemicals and oil stains are washed out easier than with standard cotton garments.

NOTE: For additional high arc rated solutions, consult local flame retardant solution to address COVID-19 contamination concerns with high arc rated suits see currently available Nomex® layering systems.

Nomex® Essential Arc High-Arc Suit
These multi-layer garments built with Nomex® are used for protection against high incident energy hazard levels and meet OSHA 1910.269 and NFPA 70E® standards.

NOTE: For additional high arc rated solutions, consult local flame retardant solution to address COVID-19 contamination concerns with high arc rated suits see currently available Nomex® layering systems.

FR face mask made with Nomex® Nano Flex™
Made with Nomex® Nano Flex, this comfortable, high-performance particulate mask from PGI, Inc. may help meet guidance from the U.S. CDC for wearing masks in environments that require FR protection while social distancing. This mask offers exceptional particulate and aerosol protection and meets NFPA 70E® Category 4 with an ATPV of 46 cal/cm².

*FR face masks are not considered as arc rated eye or face protection per ASTM F2178 and should not be substituted for arc flash eye or face protection prescribed by a site arc flash hazard assessment.

For light liquid chemical splash protection with arc flash and cut resistance:
SHOWA 240™
Lightweight and comfortable, these 13-gauge gloves lined with Kevlar® have a sponge neoprene palm coating. Flame resistant Kevlar® fiber helps enable protection against arc flash up to level 2, according to open arc/box tests. Flat dipped sponge neoprene coating provides limited chemical hazard protection combined with enhanced grip. The anatomical design helps prevent hand fatigue.

For a full list of PPE solutions, visit SafeSPEC™

For a full list of PPE solutions, visit SafeSPEC™
For protection against dirt without compromising flame resistance or arc flash protection:

**ProShield® 6 SFR**

Providing a barrier against non-hazardous aerosols and particles, ProShield® 6 SFR is a cost-effective solution designed to help protect and preserve primary protective garments. ProShield® 6 SFR garments are designed to keep primary FR garments clean from things like dirt, dust and grime, while not contributing to additional burn injury when exposed to a flame source. This coverall should be worn on top of an FR garment, such as a garment made of Nomex® Comfort.

For chemical-resistant/flame-resistant (CR/FR) protection:

**Tychem® 2000 SFR**

Tychem® 2000 SFR provides chemical and secondary flame protection in a lightweight garment. Worn over primary FR garments such as Nomex® Comfort, they won’t ignite if a flash fire occurs and won’t contribute to additional burn injury.

**Tychem® 6000 FR**

Tychem® 6000 FR styles TP98T and TP99T are single-layer garments that provide triple hazard protection against liquid chemical splash, flash fire and electric arc flash. Tychem® 6000 FR offers at least 30 minutes of protection against more than 180 toxic industrial chemicals and may be used as a primary FR garment.

For an ideal balance of protection, durability and comfort combined with an inherent barrier against fine particles and where an FR hazard is not present:

**Tyvek® 400**

Tyvek® 400 garments are composed of flashspun high-density polyethylene, which creates a unique, nonwoven material. Tyvek® 400 fabric offers an inherent barrier against particles (down to 1 micron in size). Protection is built into the fabric itself; there are no films or laminates to abrade or wear away.

**Tychem® 4000**

Tychem® 4000 provides effective protection against a range of chemical environments, offering at least 30 minutes of protection against more than 120 chemical challenges.

**Tychem® 6000**

Tychem® 6000 garments consist of a proprietary barrier film laminated to a heavy-duty Tyvek® substrate, making it resistant to liquid jet. These garments offer excellent chemical permeation protection against an extensive range of chemicals, including numerous toxic industrial organic chemicals and highly concentrated inorganic chemicals.

For a full list of PPE solutions, visit SafeSPEC™.
Transmission

In the transmission lines, there are specialized activities, such as inspection and maintenance on specific equipment, requiring constant supervision and excellent skills of the electricians.

Tasks

| Operation and maintenance of stream airline networks and substations |
| Operation and switching equipment |
| Maintenance of energized networks |
| Execution of temporary grounding |

Hazards

| Heat |
| Electromagnetic field |
| Voltage |
| Arc flash |
| Cuts |
| Dust |

Available PPE options

For arc flash protection combined with inherent heat and flame protection:

**Evolu® built with Nomex®**

This lightweight Nomex® blended fabric is CAT 2 AR/FR and NFPA 2112 compliant, providing workers with comfortable protection. Garments are available in men’s and women’s styles and sizes.

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<td>F1506</td>
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**Nomex® Essential Arc**

Nomex® Essential Arc is engineered to provide >8 cal/cm² ATPV protection combined with enhanced durability against abrasion. Nomex® is resistant to many chemicals and oil stains are washed out easier than with standard cotton garments.

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**FR face mask made with Nomex® Nano Flex’**

Made with Nomex® Nano Flex, this comfortable, high-performance particulate mask from PGI, Inc. may help meet guidance from the U.S. CDC for wearing masks in environments that require FR protection while social distancing. This mask offers exceptional particulate and aerosol protection and meets NFPA 70E® Category 4 with an ATPV of 46 cal/cm².

*FR face masks are not considered as arc rated eye or face protection per ASTM F2178 and should not be substituted for arc flash eye or face protection prescribed by a site arc flash hazard assessment.

For a balance of multi-hazard hand protection against arc flash and cuts combined with enhanced dexterity:

**Youngstown FR Ground Glove 12-3365-60**


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<td>150-2016</td>
<td>A5</td>
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Hazards

| Heat |
| Electromagnetic field |
| Voltage |
| Arc flash |
| Cuts |
| Dust |

For protection against dirt without compromising flame resistance or arc flash protection:

**ProShield® 6 SFR**

Providing a barrier against non-hazardous aerosols and particles, ProShield® 6 SFR is a cost-effective solution designed to help protect and preserve primary protective garments. ProShield® 6 SFR garments are designed to keep primary FR garments clean from things like dirt, dust and grime, while not contributing to additional burn injury when exposed to a flame source. This coverall should be worn on top of an FR garment, such as a garment made of Nomex® Comfort.

For an ideal balance of protection, durability and comfort combined with an inherent barrier against fine particles and where an FR hazard is not present:

**Tyvek® 400**

Tyvek® 400 garments are composed of flash spun high-density polyethylene, which creates a unique, nonwoven material. Tyvek® 400 fabric offers an inherent barrier against particles (down to 1.0 micron in size). Protection is built into the fabric itself; there are no films or laminates to abrade or wear away.

For a full list of PPE solutions, visit SafeSPEC™.
Available PPE options

For arc flash protection combined with inherent heat and flame protection:

Evolv® built with Nomex®

This lightweight Nomex® blended fabric is CAT 2 AR/FR and NFPA 2112 compliant, providing workers with comfortable protection. Garments are available in men's and women's styles and sizes.

Nomex® Essential Arc

Nomex® Essential Arc is engineered to provide ≥8 cal/cm² ATPV protection combined with enhanced durability against abrasion. Nomex® is resistant to many chemicals and oil stains are washed out easier than with standard cotton garments.

Nomex® Comfort

Nomex® Comfort is a lightweight, quick-drying innovative fabric that delivers extreme heat and flame protection, maximum comfort and excellent durability. Garments are available in men's and women's styles and sizes.

NOTE: Above compliance and certifications are for Nomex® Essential Arc fabric; please consult with garment manufacturer for garment certifications.

FR face mask made with Nomex® 'Nano Flex'

Made with Nomex® Nano Flex, this comfortable, high-performance particulate mask made from PG, Inc. may help meet guidance from the U.S. CDC for wearing masks in environments that require FR protection while social distancing. This mask offers exceptional particulate and aerosol protection and meets NFPA 70E® Category 4 with an ATPV of 46 cal/cm².

*FR face masks are not considered as arc rated eye or face protection per ASTM F1506 and should not be substituted for arc flash eye or face protection prescribed by a site arc flash hazard assessment.

For light liquid chemical splash protection with arc flash and cut resistance:

SHOWA 240®

Lightweight and comfortable, these 19-gauge gloves lined with Kevlar® have a sponge neoprene palm coating. Flame-resistant Kevlar® fiber helps enable protection against arc flash up to level 2, according to open arc box tests. Flat dipped sponge neoprene coating provides limited chemical hazard protection combined with enhanced grip. The anatomical design helps prevent hand fatigue.

3X31C 3511 2221X
Arc rating
3X31C

NOTE: EN 388:2016 and EN 407:2020 are equivalent to ISO 21680:2018 and future ISO 21681, respectively.

For protection against dirt without compromising flame resistance or arc flash protection:

ProShield® 6 SFR

Providing a barrier against non-hazardous aerosols and particles, ProShield® 6 SFR is a cost-effective solution designed to help protect and preserve primary protective garments. ProShield® 6 SFR garments are designed to keep primary FR garments clean from things like dirt, dust and grime, while not contributing to additional burn injury when exposed to a flame source. This coverall should be worn on top of an FR-garment, such as a garment made of Nomex® Comfort.

For protection against chemicals, biological hazards and hazardous particulates and where an FR hazard is not present:

Tyvek® 400

Tyvek® 400 garments are composed of flashspun high-density polyethylene, which creates a unique, nonwoven material. Tyvek® 400 fabric offers an inherent barrier against particles (down to 1.0 micron in size). Protection is built into the fabric itself; there are no films or laminates to abrade or wear away.

Tyvek® 500 HV

Tyvek® 500 HV garments are permeable to both air and water vapor yet repel water-based liquids and aerosols. They offer an excellent barrier against fine particles and fibers. Fluorescent orange with silver gray retroreflective material makes these garments highly visible during the day as well as in the night (when exposed to a light source).

For a full list of PPE solutions, visit SafeSPEC™.
Distribution

**Tasks**

Maintenance at underground distribution systems

**Hazards**

- Heat
- Explosion
- Confined spaces
- Arc flash
- Electromagnetic field
- Dust
- Biological agents
- Sewage
- Dirty job

**For a full list of PPE solutions, visit SafeSPEC™**

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Tyvek® 800

Robust yet lightweight, Tyvek® 800 garments provide an effective barrier against many low-concentrated inorganic chemicals (even under pressure) and small-sized hazardous particulates, as well as oil repellency. Ideal for cleaning operations with water pressure jets.

Tychem® 2000

Tychem® 2000 is a lightweight and durable fabric that uses the strength of Tyvek® fabric and a polyethylene coating. Tychem® 2000 offers permeation barrier protection for at least 30 minutes against more than 40 chemical challenges.

Tychem® 6000 FR

Tychem® 6000 FR styles TP198T and TP199T are single-layer garments that provide triple hazard protection against liquid chemical splash, flash fire and electric arc flash. Tychem® 6000 FR offers at least 30 minutes of protection against more than 180 toxic industrial chemicals and may be used as a primary FR garment.

Tychem® Tape

Tychem® 2000 Tape helps hold a sleeve over a glove, a pant leg over a boot or a closure flap closed, while providing protection against a variety of inorganic acids and bases, as well as common industrial cleaning agents, such as bleach. The tape tears easily for quick and convenient application. Repositionable once applied, the tape’s elasticity enables tight adhesion to help prevent leaks.

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**Nexum® Essential Arc**

Nomex® Essential Arc is engineered to provide >8 cal/cm² ATPV protection combined with enhanced durability against abrasion. Nomex® is resistant to many chemicals and oil stains are washed out easier than with standard cotton garments.

**For hand protection, but electromagnetic field protection is not required:**

Superior Glove® Endura® 378GOBKL

Made of goatskin leather treated with Oilbloc® for oil and water repellency, these Endura® gloves feature a seamless-knit Kevlar® lining. These driver-style gloves are exceptionally tough and abrasion resistant. They provide 41 cal/cm² ATPV protection.

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**Available PPE options**

For arc flash protection combined with inherent heat and flame protection:

Evolv™ built with Nomex®

This lightweight Nomex® blended fabric is CAT 2 AR/FR and NFPA 2112 compliant, providing workers with comfortable protection. Garments are available in men’s and women’s styles and sizes.

Nexum® Essential Arc

Nomex® Essential Arc is engineered to provide >8 cal/cm² ATPV protection combined with enhanced durability against abrasion. Nomex® is resistant to many chemicals and oil stains are washed out easier than with standard cotton garments.

FR face mask made with Nomex® Nano Flex

Made with Nomex® Nano Flex, this comfortable, high-performance particulate mask from PGI, Inc. may help meet guidance from the U.S. CDC for wearing masks in environments that require FR protection while social distancing. This mask offers exceptional particulate and aerosol protection and meets NFPA 70E® Category 4 with an ATPV of 46 cal/cm².

*FR face masks are not considered as arc rated eye or face protection per ASTM F1506 and should not be substituted for arc flash eye or face protection prescribed by a site arc-flash hazard assessment.

**For a full list of PPE solutions, visit SafeSPEC™**
Tasks
Maintenance of energized networks
Servicing electrical substation panels

Hazards
Arc flash
Cuts
Dust
Electromagnetic field
Heat

For a full list of PPE solutions, visit SafeSPEC™.

WARNING: Leather protectors are to be used only for mechanical protection over insulating rubber gloves and shall not be used for electrical protection per ASTM F696.

Youngstown Leather Protector 16-5200-14

ProShield® 6 SFR
Providing a barrier against non-hazardous aerosols and particles, ProShield® 6 SFR is a cost-effective solution designed to help protect and preserve primary protective garments. ProShield® 6 SFR garments are designed to keep primary FR garments clean from things like dirt, dust and grime, while not contributing to additional burn injury when exposed to a flame source. This coverall should be worn on top of an FR garment, such as a garment made of Nomex® Comfort.

For protection against dirt without compromising flame resistance or arc flash protection:

Performance for when everything’s on the line
Global reach

With operations in 96 countries and technical centers staffed with experts across the globe, we are here to provide you with the support you need when choosing the right PPE.

Our Arc-Man® (arc flash injury evaluation) and Thermo-Man® (life-sized thermal burn injury evaluation) units provide compelling demonstrations that help educate industrial workers about the durability and heat, flame and electric arc resistance that DuPont Safety PPE delivers.

We’re here to help

DuPont™ SafeSPEC™, our powerful web-based tool, can assist you with finding the appropriate DuPont garments for chemical, controlled environment, thermal, electric arc and mechanical hazards.

SafeSPEC™ has a full permeation test results database for Tychem® fabric and allows you to search by either hazard or industry to help you find the right protection for the job at hand.

safespec.dupont.com
**WARNING:** Tyvek®, ProShield®, and most Tychem® garments, including Tychem® 2000 Tape, should not be used around heat, flames, sparks or in potentially flammable or explosive environments.

Only Tychem® 6000 FR and Tychem® 10000 FR garments are designed and tested to help reduce injury during escape from a flash fire. ProShield® 6 SFR and Tychem® 2000 SFR garments offer secondary flame resistance and are designed to be used over primary flame-resistant garments, including but not limited to, Nomex® Essential (Nomex® IIIA) or Nomex® Comfort garments. Users of Tychem® 10000 FR, Tychem® 2000 SFR, and ProShield® 6 SFR garments, should not knowingly enter an explosive environment. Consult the Tychem® User Manual, located on our website, for instructions on proper use, care and maintenance of your Tychem® garments.

ProShield® 6 SFR and Tychem® 2000 SFR coveralls provide only secondary flame-resistant protection. They must always be worn over an appropriate primary flame-resistant garment in an environment that needs flame protection, along with other personal protective equipment that protects your face, hands and feet.

Do not wear non-flame-resistant garments in potentially flammable or explosive environments. Instead, consider use of flame-resistant or secondary flame-resistant garments, which must be worn over primary flame-resistant garments.

This information is based upon technical data that DuPont believes to be reliable. It is subject to revision as additional knowledge and experience become available. It is the user's responsibility to determine the level of toxicity and the proper personal protective equipment needed. This information is intended for use by persons having the technical expertise to undertake evaluation under their own specific end-use conditions, at their own discretion and risk. Anyone intending to use this information should first check that the garment selected is suitable for the intended use. The end-user should discontinue use of garment if fabric becomes torn, worn or punctured, to avoid potential chemical exposure. Since conditions of use are beyond our control, DUPONT MAKES NO WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING BUT NOT LIMITED TO WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE AND ASSUME NO LIABILITY IN CONNECTION WITH ANY USE OF THIS INFORMATION. This information is not intended as a license to operate under or a recommendation to infringe any patent or technical information of DuPont or other persons covering any material or its use.

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