Personal protective solutions for chemical manufacturing 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 workers in chemical manufacturing industries around the world.

Because their safety is our business, workers in the chemical manufacturing industries 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 face a range of workplace hazards with confidence.

Our brands

**Nomex®**
DuPont™ Nomex® offers a tested and proven portfolio of protective solutions that continue 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 workers with superior protection from small-sized hazardous particles, including lead, asbestos and mold. And because protection is built into the fabric itself, there are no films or laminates to abrade or wear away.

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

*For high arc-rated solutions, visit dpp.dupont.com for available Nomex® layering systems.
Workers in chemical manufacturing industries face a variety of on-the-job hazards, including flash fire, sharp edges, punctures and exposure to hazardous chemicals, dust and solvents—to name just a few.

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.

DuPont PPE solutions are designed to meet or exceed global standards for protection and performance, including National Fire Protection Association (NFPA), ASTM International, Canadian General Standards Board (CGSB), American National Standards Institute (ANSI), International Organization for Standardization (ISO) and China GB National Standards.

To help you in the decision-making process, from risk assessment through implementation, we recommend using the 4P methodology:
Chemical manufacturing—creating a variety of products means a variety of hazards

There are five main chemical manufacturing subsegments—commodities, agrochemical, pharmaceutical, specialty and consumer. Workers in each of these subsegments manufacture a multitude of different products that are critical to our daily lives.

While doing this critical work, these essential workers are exposed to a variety of hazards ranging from flash fire and hazardous chemicals, dust and solvents to sharp edges and punctures. As a result, health, safety and environment (HSE) managers have many tasks to balance.

DuPont offers a broad range of comprehensive, one-stop PPE solutions to address these hazards and help simplify the PPE selection process, including: Nomex® garments for flash fire hazards; Tyvek® garments for protection against fine particle hazards and low level liquid splashes; Tychem® garments, gloves and tape for protection against concentrated chemicals; and gloves made with Kevlar® for cut and multi-hazard protection.

DuPont™ SafeSPEC™, our powerful web-based tool, has a full permeation test results database for Tychem® fabrics and allows you to search by hazard to help find the right protection. DuPont™ Thermo-Man®, the world’s most advanced life-sized thermal burn injury evaluation unit, is used in our technical centers around the world to evaluate the heat and flame resistance that FR garments can deliver in a simulated flash fire.

As an industry leader in chemical manufacturing, DuPont also has a large team of experts around the globe who are available to work side by side with HSE managers to help them navigate the available PPE solutions for each site based on the specific hazards workers face.
Tasks
Perform analytical testing on all types of manufacturing raw materials, products and intermediate streams.

Hazards
Chemical exposures
Flash fire
Cut hazards requiring either cut level A2 or A3 protection OR cut level A2 protection with thermal level 4 protection.

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

Available PPE options
Flame-resistant (FR) garments

Nomex® Comfort
Nomex® Comfort is a lightweight, quick-drying innovative fabric that delivers extreme heat and flame protection, maximum comfort and excellent durability.

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

Nomex® FR/CP lab coat
Made of innovative Westex® ShieldCXP™ fabric with Nomex® Essential fibers, this lightweight, breathable flame-resistant/chemical-protective (FR/CP) lab coat helps provide protection against multiple hazards and is comfortable to wear. It won’t ignite during short-duration thermal incidents or emergency exposure to flame and repels small amounts of liquid chemicals. This innovative lab coat offers 5.6 cal/cm² arc thermal performance value (ATPV) protection.

FR face mask made with Nomex®
Made with Nomex® Comfort fabric, this FR face mask from PGI Safety 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 FR face mask offers exceptional breathability and durability with inherent, built-in flame resistance that cannot be washed out or worn away.

NOTE: Please consult with fabric and garment manufacturer for certifications.

NOTE: Certifications listed here are for Nomex® Comfort fabric; consult with garment manufacturer for garment certifications.

NOTE: Certifications listed here are for Nomex® Essential fabric; consult with garment manufacturer for garment certifications.

NOTE: Certifications listed here are for Nomex® FR/CP fabric; consult with garment manufacturer for garment certifications.

NOTE: FR face masks are for use while social distancing and may be used for other tasks identified by a site hazard risk assessment.

DuPont products and PPE solutions are identified by our licensees’ branded names.
For a full list of PPE solutions, visit SafeSPEC.

Non-FR/chemical-protective garments

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

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

**Tychem® 5000 C3275**
This knee-length apron with attached sleeves offers enhanced frontal protection. It is made with Tychem® 5000 fabric, a multi-layer film barrier laminated to a durable polypropylene substrate. Strong and durable, Tychem® 5000 offers an effective barrier to a broad range of (>145) chemicals.

**Tychem® 6000**
Tychem® 6000 garments are made of a proprietary barrier film laminated to a Tyvek® substrate. The fabric offers at least 30 minutes of protection against more than 180 chemical challenges. Tychem® 6000 garments are strong, durable and lightweight.

Chemical-resistant (CR) gloves*

**Tychem® NT470**
These unlined, 9 mil nitrile gloves offer protection against a wide range of solvents, oils, hydrocarbons, greases and other chemicals. Thin and lightweight, Tychem® NT470 gloves are ergonomically designed to maximize comfort. The bisque finish grip makes working in humid environments easier.

**Tychem® NP570 CT**
These 68 mil neoprene gloves, which feature an engineered yarn liner, provide protection against the dual risk of chemical exposure and cut. Tychem® NP570 CT gloves provide ANSI level A5 and EN level E cut protection, as well as first-class defense against acids, caustics, solvents, greases and oils.

For a full list of PPE solutions, visit SafeSPEC.

Laboratory

Tasks
Perform analytical testing on all types of manufacturing raw materials, products and intermediate streams.

Hazards
Chemical exposures
Flash fire
Cut hazards requiring either cut level A2 or A3 protection OR cut level A2 protection with thermal level 4 protection.

Thermal gloves

**Superior Glove® Dexterity® 5XG/PXNE**
Made with a blend of Kevlar® and Protex® yarns, these winter-lined arc flash gloves provide excellent heat and cut resistance. Neoprene palm coating features great FR properties and good oil resistance. These gloves provide 25 cal/cm² ATPV protection.

**Ironclad Heatsworth® Heavy Duty HW6X**
These heavy-duty gloves have a full Kevlar® shell for extra heat protection and improved cut resistance combined with a Kovenex® palm liner and silicone-laminated Kevlar® blend finger sidewalls for extreme heat protection in critical areas.

For a full list of PPE solutions, visit SafeSPEC.

Laboratory

Cut-resistant gloves

**Superior Glove® Dexterity® S18NGPU**
Seamless knit glove, yellow 18-gauge Kevlar® engineered blend shell, gray polyurethane palm dip coating. Knit cuff.

**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® gloves and tape should not be used around heat, open flame, sparks or in potentially flammable environments. For professional use only.
**BACTERIA & FUNGI**

Cut hazards requiring level 4 protection

Chemical exposures

Particle exposures

Flash fire

Hazards requiring cut level A2 and thermal level 4 protection

Loading/unloading rail cars or trucks

Tasks

Loading/unloading bulk raw materials and products

Transfer and monitor material transfers

Hazards

Flash fire

Particle exposures

Chemical exposures

**Available PPE options**

**Flame-resistant (FR) 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.

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

**FR face mask made with Nomex**
Made with Nomex® Comfort fabric, this FR face mask from PGI Safety may help meet guidance from the U.S. CDC for wearing masks in environments that require FR protection while social distancing. This FR face mask offers exceptional breathability and durability with inherent, built-in flame resistance that cannot be washed out or worn away.

**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® 800**
Tyvek® 800 garments combine resistance to low-concentration, water-based inorganic chemicals with the strength and durability of Tyvek®. The coveralls provide an effective barrier against many water-based inorganic chemicals in low concentration and particles (down to 10 micron in size). Protection is built into the fabric itself; there are no films or laminates to abrade or wear away.

**Non-FR/chemical-protective garments**

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

**Tychem® 4000**
Tychem® 4000 offers 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 are made of a proprietary barrier film laminated to a Tyvek® substrate. The fabric offers at least 30 minutes of protection against more than 180 chemical challenges. Tychem® 6000 garments are strong, durable and lightweight.

**Tychem® 10000**
Tychem® 10000, an extremely durable fabric that is puncture- and tear-resistant, offers at least 30 minutes of barrier protection against 322 chemical challenges with no observed breakthrough. Tychem® 10000 is specifically designed for protection against toxic, corrosive liquids and solid chemicals.

**Chemical-resistant/Flame-resistant (CR/FR) garments**

**Tychem® 2000 SFR**
Tychem® 2000 SFR offers 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 TP198T and TP199T are single-layer garments that offer 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.

**Chemical-resistant (CR) gloves**

**Tychem® PV350**
Extremely durable, these 55-mil polyvinyl chloride (PVC) gloves provide protection against chemicals, oils and greases. The cotton/jersey knit lining adds comfort and flexibility while the textured grip makes it easier to grasp wet objects.
Tychem NT470
These unlined, 18-mil nitrile gloves offer protection against a wide range of solvents, oils, hydrocarbons, greases and other chemicals. Thin and lightweight, Tychem NT470 gloves are ergonomically designed to maximize comfort. The biseque finish grip makes working in humid environments easier.

Cat III
EN 388:2016
EN 374-5:2016
Tychem NP570 CT
These 68-mil neoprene gloves, which feature an engineered yarn liner, provide protection against the dual risk of chemical exposure and cut. Tychem® NP570 CT gloves provide ANSI level A5 and EN level E cut protection, as well as first-class defense against acids, caustics, solvents, greases and oils.

Cat III
EN 388:2016
EN 374-5:2016
Tychem® BT730
These unlined, 14-mil butyl gloves provide protection against a wide array of chemicals, including acids, ketones and alcohols. Light and thin with a “second-skin” feel, anatomical shape and rough surface, Tychem® BT730 gloves are comfortable and enable optional grip. Impermeable for working in damp or greasy environments.

Cat III
EN 388:2016
EN 374-5:2016
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 with the strength and durability of Tyvek®. The coveralls are ideal for workers who require FR protection while social distancing. This FR face mask offers exceptional breathability and durability with inherent, built-in flame resistance that cannot be washed out or worn away.

Cat III
EN 388:2016
EN 374-5:2016
Ironclad Heatworx® Heavy Duty HW6X
These heavy-duty gloves have a full Kevlar® shell for extra heat protection and improved cut resistance combined with a Kovenex® palm liner and silicone-laminated Kevlar® blend finger sidewalls for extreme heat protection in critical areas.

Cat II
EN 388:2016
EN ISO 11612
Tychem® 800 garments combine resistance to low-concentration, water-based inorganic chemicals with the strength and durability of Tyvek®. The coveralls provide an effective barrier against many water-based inorganic chemicals in low concentration and particles (down to 1.0 micron in size).

Type 4-B
Type 3-B
Type 5-B
Type 6-B
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 10 micron in size). Protection is built into the fabric itself; there are no films or laminates to abrade or wear away.

Type 4-B
Type 3-B
Tyvek® 800 garments are flexible, thin, and lightweight with exceptional breathability and durability, making them great for wear during social distancing.

Type 4-B
Type 3-B
Tyvek® Essential is a highly durable protective solution that helps minimize break-open and offers excellent heat and flame protection.

NOTE: Certifications listed here are for Tyvek® Essential fabric; consult with garment manufacturer for garment certifications.

FR face masks are for use while social distancing and may be used for other tasks identified by a site hazard risk assessment.

Superior Glove® Dexterity® 58G/KPXNE
Made with a blend of Kevlar® and Proteon® yarns, these winter-lined arc flash gloves provide excellent heat and cut resistance. Neoprene palm coating features great FR properties and good oil resistance. These gloves provide 25 cal/cm² ATPV protection.

Cat III
EN 388
EN 407
ANSI
ANSI
Heat
A2
4043E
5
2X43E
39200X
Ironclad Heatworx® Heavy Duty HW6X
These heavy-duty gloves have a full Kevlar® shell for extra heat protection and improved cut resistance combined with a Kovenex® palm liner and silicone-laminated Kevlar® blend finger sidewalls for extreme heat protection in critical areas.

Cat II
EN 388:2016
EN ISO 11612
Heat
A2
4043E
5
2X43E
39200X
Available PPE options
Flame-resistant (FR) 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.

ANSI
FRP
CGSB
Cat III
EN 11612
Nomex® Essential
A highly durable protective solution that helps minimize break-open and offers excellent heat and flame protection.

NOTE: Certifications listed here are for Nomex® Essential fabric; consult with garment manufacturer for garment certifications.

FR face masks made with Nomex®
Made with Nomex® Comfort fabric, this FR face mask from PGI Safety may help meet guidance from the U.S. CDC for wearing masks in environments that require FR protection while social distancing. This FR face mask offers exceptional breathability and durability with inherent, built-in flame resistance that cannot be washed out or worn away.

NOTE: Certifications listed here are for Nomex® Comfort fabric; consult with garment manufacturer for garment certifications.

Particle exposures
Particle garments

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 10 micron in size). Protection is built into the fabric itself; there are no films or laminates to abrade or wear away.

Tyvek® 800
Tyvek® 800 garments combine resistance to low-concentration, water-based inorganic chemicals with the strength and durability of Tyvek®. The coveralls provide an effective barrier against many water-based inorganic chemicals in low concentration and particles (down to 1.0 micron in size).

For a full list of PPE solutions, visit SafeSPEC™.
Non-FR/chemical-protective garments

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

**Tychem® 4000**
Tychem® 4000 offers 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 are made of a proprietary barrier film laminated to a Tyvek® substrate. The fabric offers at least 30 minutes of protection against more than 180 chemical challenges. Tychem® 6000 garments are strong, durable and lightweight.

**Tychem® 10000**
Tychem® 10000, an extremely durable fabric that is puncture- and tear-resistant, offers at least 30 minutes of barrier protection against 322 chemical challenges with no observed breakthrough. Tychem® 10000 is specifically designed for protection against toxic, corrosive gases, liquids and solid chemicals.

Chemical-resistant/flame-resistant (CR/FR) garments

**Tychem® 2000 SFR**
Tychem® 2000 SFR offers 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 offer 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® PV350**
Extremely durable, these 55-mil PVC gloves provide protection against chemicals, oils and greases. The cotton/nylon knit lining adds comfort and flexibility while the textured grip makes it easier to grasp wet objects.

**Tychem® NT470**
These unlinned, 15-mil nitrile gloves offer protection against a wide range of solvents, oils, hydrocarbons, greases and other chemicals. Thin and lightweight, Tychem® NT470 gloves are ergonomically designed to maximize comfort. The bisque finish grip makes working in humid environments easier.

**Tychem® NP570 CT**
These 68-mil neoprene gloves, which feature an engineered yarn liner, provide protection against the dual risk of chemical exposure and cut. Tychem® NP570 CT gloves provide ANSI level A5 and EN level E cut protection, as well as first-class defense against acids, caustics, solvents, greases and oils.

**Tychem® BT730**
These unlinned, 14-mil butyl gloves provide protection against a wide array of chemicals, including acids, ketones and alcohols. Light and thin with a “second-skin” feel, anatomical shape and rough surface, Tychem® BT730 gloves are comfortable and enable optimal grip. Impermeable for working in damp or greasy environments.

**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® gloves and tape should not be used around heat, open flame, sparks or in potentially flammable environments. For professions at risk*
Available PPE options

**Flame-resistant (FR) 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.

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<th>Type 3-B</th>
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*NOTE: Certifications listed here are for Nomex® Comfort fabric; consult with garment manufacturer for garment certifications.*

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

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<th>Type 3-B</th>
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<td><strong>CGSB</strong></td>
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*NOTE: Certifications listed here are for Nomex® Essential fabric; consult with garment manufacturer for garment certifications.*

**FR face mask made with Nomex®**
Made with Nomex® Comfort fabric, this FR face mask from PGI Safety may help meet guidance from the U.S. CDC for wearing masks in environments that require FR protection while social distancing. This FR face mask offers exceptional breathability and durability with inherent, built-in flame resistance that cannot be washed out or worn away.

*FR face masks are for use while social distancing and may be used for other tasks identified by a site hazard risk assessment.*

**Particle garments**

**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 10 micron in size). Protection is built into the fabric itself; there are no films or laminates to abrade or wear away.

**Tyvek® 800**
Tyvek® 800 garments combine resistance to low-concentration, water-based inorganic chemicals with the strength and durability of Tyvek®. The coveralls provide an effective barrier against many water-based inorganic chemicals in low concentration and particles (down to 10 micron in size).

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**Chemical-resistant (CR) gloves**

**Tychem® PV350**
Extremely durable, these 55-mil PVC gloves provide protection against chemicals, oils and greases. The cotton/jersey knit lining adds comfort and flexibility while the textured grip makes it easier to grasp wet objects.

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<tr>
<th>Type</th>
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</table>

**Tychem® 10000**
Tychem® 10000 is an extremely durable fabric that is puncture- and tear-resistant, offers at least 30 minutes of barrier protection against 322 chemical challenges with no observed breakthrough. Tychem® 10000 is specifically designed for protection against toxic, corrosive gases, liquids and solid chemicals.

**Tychem® 4000**
Tychem® 4000 offers 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 are made of a proprietary barrier film laminated to a Tyvek® substrate. The fabric offers at least 30 minutes of protection against more than 180 chemical challenges. Tychem® 6000 garments are strong, durable and lightweight.

**Tychem® PV350**
For a full list of PPE solutions, visit SafeSPEC™.
### Tychem® NT470

These unlined, 18-mil nitrile gloves offer protection against a wide range of solvents, oils, hydrocarbons, greases and other chemicals. Thinner and lightweight, Tychem® NT470 gloves are ergonomically designed to maximize comfort. The biaxial finish grips making works in humid environments easier.

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### Tychem® NP570 CT

These 68-mil neoprene gloves, which feature an engineered yarn liner, provide protection against the dual risk of chemical exposure and cut. Tychem® NP570 CT gloves provide ANSI level A5 and EN level E cut protection, as well as first-class defense against acids, caustics, solvents, greases and oils.

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### Tychem® BT730

These unlined, 14-mil butyl gloves provide protection against a wide array of chemicals, including acids, ketones and alcohols. Light and thin with a "second-skin" feel, anatomical shape and rough surface, Tychem® BT730 gloves are comfortable and enable optimal grip. Impermeable for working in damp or greasy environments.

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### 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® gloves and tape should not be used around heat, open flame, sparks or in potentially flammable environments. For professional use only.*

### Thermal gloves

#### Superior Glove® Dexterity® 5SK/PXN6

Made with a blend of Kevlar® and Proven® yarns, these winter-lined arc flash gloves provide excellent heat and cut resistance. Neoprene palm coating features great FR properties and good oil resistance. These gloves provide 25 cal/cm² ATPV protection.

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<thead>
<tr>
<th>ANSI</th>
<th>Cat</th>
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<tr>
<td>A5</td>
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### Ironclad Heatworx® Heavy Duty HV6X

These heavy-duty gloves have a full Kevlar® shell for extra heat protection and improved cut resistance combined with a Kovenex® palm liner and silicone-laminated Kevlar® blend finger sidewalls for extreme heat protection in critical areas.

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<tr>
<th>Cat Ii</th>
<th>EN 388:2016</th>
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<tr>
<td></td>
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### Raw material/ process sampling

#### Hazards

- Chemical exposures
- Particle exposures
- Flash fire
- Pressurized equipment
- Cut hazards requiring cut level A2 and thermal level 4 protection

#### Thermal gloves

- **Superior Glove® Dexterity® 5SK/PXN6**
  - Made with a blend of Kevlar® and Proven® yarns, these winter-lined arc flash gloves provide excellent heat and cut resistance. Neoprene palm coating features great FR properties and good oil resistance. These gloves provide 25 cal/cm² ATPV protection.

- **Ironclad Heatworx® Heavy Duty HV6X**
  - These heavy-duty gloves have a full Kevlar® shell for extra heat protection and improved cut resistance combined with a Kovenex® palm liner and silicone-laminated Kevlar® blend finger sidewalls for extreme heat protection in critical areas.

### Available PPE options

#### Flame-resistant (FR) 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.

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

- **FR face mask made with Nomex™**
  - Made with Nomex® Comfort fabric; this FR face mask from PGI Safety may help meet guidance from the U.S. CDC for wearing masks in environments that require FR protection while social distancing. This FR face mask offers exceptional breathability and durability with inherent, built-in flame resistance that cannot be washed out or worn away.

**NOTE:** Certifications listed here are for Nomex® Comfort fabric; consult with garment manufacturer for garment certifications.

- **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 0.1 micron in size). Protection is built into the fabric itself; there are no films or laminates to abrade or wear away.

- **Tyvek® 800**
  - Tyvek® 800 garments combine resistance to low-concentration, water-based inorganic chemicals with the strength and durability of Tyvek®. The coveralls provide an effective barrier against many water-based inorganic chemicals in low concentration and particles (down to 0.1 micron in size).

**NOTE:** Certifications listed here are for Nomex® Essential fabric; consult with garment manufacturer for garment certifications.

- **FR face masks are for use while social distancing and may be used for other tasks identified by a site hazard risk assessment.**

For a full list of PPE solutions, visit SafeSPEC®

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

Tychem® 4000
Tychem® 4000 offers 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 are made of a proprietary barrier film laminated to a Tyvek® substrate. The fabric offers at least 30 minutes of protection against more than 180 chemical challenges. Tychem® 6000 garments are strong, durable and lightweight.

Tychem® 10000
Tychem® 10000, an extremely durable fabric that is puncture- and tear-resistant, offers at least 30 minutes of barrier protection against 322 chemical challenges with no observed breakthrough. Tychem® 10000 is specifically designed for protection against toxic, corrosive gases, liquids and solid chemicals.

Tychem® 2000 FR
Tychem® 2000 FR styles TP98T and TP99T are single-layer garments that offer 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® PV350
Extremely durable, these 55-mil PVC gloves provide protection against chemicals, oils and greases. The cotton/ jersey knit lining adds comfort and flexibility while the textured grip makes it easier to grasp wet objects.

Tychem® NP530
Tychem® NP530 gloves are resistant to a range of chemicals. Neoprene over natural rubber construction enhances dexterity and reduces hand fatigue. The cotton flock lining increases comfort and the embossed grip encourages run-off of fluid.

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® gloves and tape should not be used around heat, open flame, sparks or in potentially flammable environments. For professional use only.
Available PPE options

Flame-resistant (FR) garments

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

**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 10 micron in size). Protection is built into the fabric itself; there are no films or laminates to abrade or wear away.

**Tyvek® 800**
Tyvek® 800 garments combine resistance to low-concentration, water-based inorganic chemicals with the strength and durability of Tyvek®. The coveralls provide an effective barrier against many water-based inorganic chemicals in low concentration and particles (down to 15 micron in size).

Non-FR/chemical-protective garments

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

**Tychem® 4000**
Tychem® 4000 offers 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 are made of a proprietary barrier film laminated to a Tyvek® substrate. The fabric offers at least 30 minutes of protection against more than 180 chemical challenges. Tychem® 6000 garments are strong, durable and lightweight.

**Tychem® 10000**
Tychem® 10000 is an extremely durable fabric that is puncture- and tear-resistant, offers at least 30 minutes of barrier protection against 322 chemical challenges. With no observed breakthrough, Tychem® 10000 is specifically designed for protection against toxic, corrosive gases, liquids and solid chemicals.

Chemical-resistant (CR)/flame-resistant (CR/FR) garments

**Tychem® 4000**
Tychem® 4000 FR offers 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**
Tychem® 6000 FR styles TP198T and TP199T are single-layer garments that offer 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® PV350**
Extremely durable, these 55-mil PVC gloves provide protection against chemicals, oils and greases. The cotton/jersey knit lining adds comfort and flexibility while the textured grip makes it easier to grasp wet objects.
Pressurized equipment

Flash fire

Particle exposures

Chemical exposures (powder and liquid)

Particle exposures

Confined space entry

Tasks

Open and closed charging of raw materials into reaction equipment

Hazards

Chemical exposures

Particle exposures

Flash fire

Pressurized equipment

Cut hazards requiring cut level A2 and thermal level 3 protection

Tychem® NT470

These unlined, 8-mil nitrile gloves offer protection against a wide range of solvents, oils, hydrocarbons, greases and other chemicals. Thin and lightweight, Tychem® NT470 gloves are ergonomically designed to maximize comfort. The biaxial finish grip makes working in humid environments easier.

Tychem® NP570 CT

These 68-mil neoprene gloves, which feature an engineered yarn liner, provide protection against the dual risk of chemical exposure and cut. Tychem® NP570 CT gloves provide ANSI level A5 and EN level E cut protection, as well as first-class defense against acids, caustics, solvents, greases and oils.

Tychem® BT730

These unlined, 14-mil butyl gloves provide protection against a wide array of chemicals, including acids, ketones and alcohols. Light and thin with a “second-skin” feel, anatomical shape and rough surface, Tychem® BT730 gloves are comfortable and enable optimal grip. Impermeable for working in damp or greasy environments.

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 chemicals with the strength and durability of Tyvek®. The coveralls have 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. The tape tears easily for quick and convenient application. Repositionable once applied, the tape’s elasticity enables tight adhesion to help prevent leaks.

Superior Glove® Dexterity™ 55G/PXNTE

Made with a blend of Kevlar® and Protex® yarns, these winter-lined arc flash gloves provide excellent heat and cut resistance. Neoprene palm coating features great FR properties and good oil resistance. These gloves provide 25 cal/cm² ATPV protection.

Ironclad Heatworx® Heavy Duty HW6X

These heavy-duty gloves have a full Kevlar® shell for extra heat protection and improved cut resistance combined with a Kovenex® palm liner and silicone-laminated Kevlar® blend finger sidewalls for extreme heat protection in critical areas.

Ironclad Heatworx® Heavy Duty HW6X

For a full list of PPE solutions, visit SafeSPEC™

Available PPE options

Flame-resistant (FR) 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: Certifications listed here are for Nomex® Comfort fabric; consult with garment manufacturer for garment certifications.

Nomex® Essential

A highly durable protective solution that helps minimize break-open and offers excellent heat and flame protection.

NOTE: Certifications listed here are for Nomex® Essential fabric; consult with garment manufacturer for garment certifications.

FR face mask made with Nomex™

Made with Nomex® Comfort fabric, this FR face mask from PGI Safety may help meet guidance from the U.S. CDC for wearing masks in environments that require FR protection while social distancing. This FR face mask offers exceptional breathability and durability with inherent, built-in flame resistance that cannot be washed out or worn away.

*FR face masks are for use while social distancing and may be used for other tasks identified by a site hazard risk assessment.

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 10 micron in size). Protection is built into the fabric itself; there are no films or laminates to degrade or wear away.

Tyvek® 800

Tyvek® 800 garments combine resistance to low-concentration, water-based inorganic chemicals with the strength and durability of Tyvek®. The coveralls provide an effective barrier against many water-based inorganic chemicals in low concentration and particles (down to 10 micron in size).

For a full list of PPE solutions, visit SafeSPEC™
Confined space entry

Tasks
Entering tanks, vessels or pits that may contain hazardous atmospheres and other hazards to perform work

Hazards
Chemical exposures
Particle exposures
Flash fire

Non-FR/chemical-protective garments

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

Tychem® 4000
Tychem® 4000 offers 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 are made of a proprietary barrier film laminated to a Tyvek® substrate. The fabric offers at least 30 minutes of protection against more than 180 chemical challenges. Tychem® 6000 garments are strong, durable and lightweight.

Tychem® '10000
Tychem® '10000, an extremely durable fabric that is puncture- and tear-resistant, offers at least 30 minutes of barrier protection against 322 chemical challenges with no observed breakthrough. Tychem® '10000 is specifically designed for protection against toxic, corrosive gases, liquids and solid chemicals.

Chemical-resistant/fluame-resistant (CR/FR) garments

Tychem® 2000 SFR
Tychem® 2000 SFR offers 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 offer 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.

Chemical-resistant (CR) gloves

Tychem® PV550
Extremely durable, these 55-mil PVC gloves provide protection against chemicals, oils and greases. The cotton/jersey knit lining adds comfort and flexibility while the textured grip makes it easier to grasp wet objects.

Tychem® NT470
These unlinned, 15-mil nitrile gloves offer protection against a wide range of solvents, oils, hydrocarbons, greases and other chemicals. Thin and lightweight, Tychem® NT470 gloves are ergonomically designed to maximize comfort. The bisque finish grip makes working in humid environments easier.

Tychem® NP530
Tychem® NP530 gloves are resistant to a range of chemicals. Neoprene over natural rubber construction enhances dexterity and reduces hand fatigue. The cotton flock lining increases comfort and the embossed grip encourages a “second-skin” feel, anatomical shape and rough surface. Tychem® BT730 gloves are comfortable and enable optimal grip. Impermeable for working in damp or greasy environments.

Tychem® NT470
Tychem® NT470 gloves are made of a proprietary barrier film laminated to a Tyvek® substrate. The fabric offers at least 30 minutes of protection against more than 180 chemical challenges. Tychem® NT470 gloves are ergonomically designed to maximize comfort. The bisque finish grip makes working in humid environments easier.

Tychem® BT730
Tychem® BT730 gloves are made of a proprietary barrier film laminated to a Tyvek® substrate. The fabric offers at least 30 minutes of protection against more than 180 chemical challenges. Tychem® BT730 gloves are ergonomically designed to maximize comfort. The bisque finish grip makes working in humid environments easier.

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® gloves and tape should not be used around heat, open flame, sparks or in potentially flammable environments. For professional use only.
Insulation work—asbestos or non-asbestos

Tasks
Handle thermal system insulation, metal bands and jacketing

Hazards
Sharp edges
Hazardous particles
Thermal hazards
Cut hazards requiring cut level A6 or A7 protection and/or thermal level 4 protection

Cut-resistant gloves

PIP G-Tek® KEV™ 09-K1600
The seamless knit construction of these PIP G-Tek® KEV™ gloves provides comfort without sacrificing dexterity. The Kevlar® fiber shell provides high tensile strength, excellent cut resistance and it won’t melt, ignite or conduct electricity. The nitrile foam grip is compatible with light oils and provides excellent abrasion resistance.

Insulation work—asbestos or non-asbestos

Tasks
Handle thermal system insulation, metal bands and jacketing

Hazards
Sharp edges
Hazardous particles
Thermal hazards
Cut hazards requiring cut level A6 or A7 protection and/or thermal level 4 protection

Chemical-resistant/ flame-resistant (CR/FR) garments

Tychem® 2000 SFR
Tychem® 2000 SFR offers 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 TP198T and TP199T are single-layer garments that offer 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.

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 10 micron in size). Protection is built into the fabric itself; there are no films or laminates to abrade or wear away.

Tyvek® 800
Tyvek® 800 garments combine resistance to low-concentration, water-based inorganic chemicals with the strength and durability of Tyvek®. The coveralls provide an effective barrier against many water-based inorganic chemicals in low concentration and particles (down to 10 micron in size).

Available PPE options

Particle garments

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 10 micron in size). Protection is built into the fabric itself; there are no films or laminates to abrade or wear away.

Tyvek® 800
Tyvek® 800 garments combine resistance to low-concentration, water-based inorganic chemicals with the strength and durability of Tyvek®. The coveralls provide an effective barrier against many water-based inorganic chemicals in low concentration and particles (down to 10 micron in size).

Cut-resistant sleeves

MCR Safety Cut Pro® 9318KT
This Cut Pro® sleeve with Hero® Technology offers high levels of protection and comfort for workers in tough environments. Made with blended Kevlar®, stainless steel and nylon fibers, this 18-inch sleeve with thumb slot provides excellent cut and abrasion resistance.

PIP Kut Gard® 10-KVSYBH
This Kut Gard® single-ply Kevlar® armor blended sleeve protects arms against lacerations and is comfortable to wear. Exclusive dirt masking design with high abrasion resistance make these gloves ideal for long-term use.

Cut-resistant gloves

PIP G-Tek® KEV™ 09-K1600
The seamless knit construction of these PIP G-Tek® KEV™ gloves provides comfort without sacrificing dexterity. The Kevlar® fiber shell provides high tensile strength, excellent cut resistance and it won’t melt, ignite or conduct electricity. The nitrile foam grip is compatible with light oils and provides excellent abrasion resistance.

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

Flame-resistant (FR) 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.

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

FR face mask made with Nomex®
Made with Nomex® Comfort fabric, this FR face mask from PGI Safety may help meet guidance from the U.S. CDC for wearing masks in environments that require FR protection while social distancing. This FR face mask offers exceptional breathability and durability with inherent, built-in flame resistance that cannot be washed out or worn away.

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® 800
Tyvek® 800 garments combine resistance to low-concentration, water-based inorganic chemicals with the strength and durability of Tyvek®. The coveralls provide an effective barrier against many water-based inorganic chemicals in low concentration and particles (down to 15 micron in size).

Non-FR/chemical-protective garments

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

Tychem® 4000
Tychem® 4000 offers 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 are made of a proprietary barrier film laminated to a Tyvek® substrate. The fabric offers at least 30 minutes of protection against more than 180 chemical challenges. Tychem® 6000 garments are strong, durable and lightweight.

Tychem® 10000
Tychem® 10000, an extremely durable fabric that is puncture- and tear-resistant, offers at least 30 minutes of barrier protection against 322 chemical challenges with no observed breakthrough. Tychem® 10000 is specifically designed for protection against toxic, corrosive gases, liquids and solid chemicals.

Chemical-resistant/Flame-resistant (CR/FR) garments

Tychem® 2000 SFR
Tychem® 2000 SFR offers 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 TP980T and TP990T are single-layer garments that offer 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.

Chemical-resistant (CR) gloves

Tychem® PV350
Extremely durable, these 55-mil PVC gloves provide protection against chemicals, oils and greases. The cotton/jersey knit lining adds comfort and flexibility while the textured grip makes it easier to grasp wet objects.
Line breaking/vessel opening

Tasks
- Shut down process
- Determine hazards
- Lockout/tagout (LOTO)
- Monitor hazardous atmospheres
- Perform work

Hazards
- Chemical exposures
- Particle exposures
- Flash fire
- Pressurized equipment

Cut hazards requiring cut level A2 and thermal level 4 protection

Tychem® NT470
These unlined, 15-mil nitrile gloves offer protection against a wide range of solvents, oils, hydrocarbons, greases and other chemicals. Thin and lightweight, Tychem® NT470 gloves are ergonomically designed to maximize comfort. The biodegradable finish makes working in humid environments easier.

Tychem® NP570 CT
These 68-mil neoprene gloves, which feature an engineered yarn liner, provide protection against the dual risk of chemical exposure and cut. Tychem® NP570 CT gloves provide ANSI level A5 and EN level E cut protection, as well as first-class defense against acids, caustics, solvents, greases and oils.

Tychem® BT730
These unlined, 14-mil butyl gloves provide protection against a wide array of chemicals, including acids, ketones and alcohols. Light and thin with a "second-skin" feel, anatomical shape and rough surface, Tychem® BT730 gloves are comfortable and enable optimal grip. Impermeable for working in damp or greasy environments.

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 clearing 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.

Thermal gloves

Superior Gloves® Dextertex® SKG/PXME
Made with a blend of Kevlar® and Protek®, these winter-lined arc flash gloves provide excellent heat and cut resistance. Neoprene palm coating features great FR properties and good oil resistance. These gloves provide 25 cal/cm² ATPV protection.

Ironclad Heatworx® Heavy Duty HW6X
These heavy-duty gloves have a full Kevlar® shell for extra heat protection and improved cut resistance combined with a Kovenex® palm liner and silicone-laminated Kevlar® blend finger sidewalls for extreme heat protection in critical areas.

Chemical-resistant/flame-resistant (CR/FR) garments

For a full list of PPE solutions, visit SafeSPEC™

Available PPE options

Flame-resistant (FR) garments

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.

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 High-Arc Suit
These multi-layer garments built with Nomex® are used for protection against high incident energy hazard levels and meet U.S. Occupational Safety and Health Administration (OSHA) 1910.269 and NFPA 70E® standards.

Tychem® 6000 FR
Tychem® 6000 FR styles TP198T and TP199T are single-layer garments that offer 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.
Maintenance—electrical work

Tasks
Performing electrical work

Hazards
Arc flash

Preventive maintenance

Tasks
Unit shutdown or start-up
Regularly scheduled preventive maintenance (PM)

Troubleshooting

Hazards
Flash fire
Chemical exposures
Struck-by hazards

Cut hazards requiring either cut level A2 or A3 protection OR cut level A2 protection with thermal level 4 protection

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

Available PPE options

Flame-resistant (FR) 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.

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

FR face mask made with Nomex®
Made with Nomex® Comfort fabric, this FR face mask from PGI Safety may help meet guidance from the U.S. CDC for wearing masks in environments that require FR protection while social distancing. This FR face mask offers exceptional breathability and durability with inherent, built-in flame resistance that cannot be washed out or worn away.

*FR face masks are for use with social distancing and may be used for other tasks identified by a site based risk assessment.

Non-FR/chemical-protective garments

Tychem® 6000
Tychem® 6000 garments are made of a proprietary barrier film laminated to a Tyvek® substrate. The fabric offers at least 30 minutes of protection against more than 180 chemical challenges. Tychem® 6000 garments are strong, durable and lightweight.

Tychem® 10000
Tychem® 10000, an extremely durable fabric that is puncture- and tear-resistant, offers at least 30 minutes of barrier protection against 322 chemical challenges with no observed breakthrough. Tychem® 10000 is specifically designed for protection against toxic, corrosive gases, liquids and solid chemicals.

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

Arc-rated, cut-resistant gloves

**Superior Glove® Dexterity® S18KGDN1**
Made with Kevlar® fiber, these Dexterity® 18-gauge FR arc flash gloves provide 25 cal/cm² ATPV protection and dual cut protection—the glove body has an ANSI level A3 cut rating and the cuff has a level A6 cut rating. A neoprene palm coating enables excellent grip—both wet and dry. Electrostatic dissipating (ESD) carbon filament imparts anti-static properties.

**SHOWA 240**
Lightweight and comfortable, 13-gauge glove lined with Kevlar® with sponge neoprene palm coating. Flame-resistant Kevlar® enables protection against arc flash up to level 2. Flat dipped sponge neoprene coating provides enhanced grip and the anatomical design helps prevent hand fatigue.

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**Arc flash level**

**Cut**

**NOTE:** Certifications listed here are for Nomex® Essential fabric; consult with garment manufacturer for garment certifications.

For a full list of PPE solutions, visit SafeSPEC™.
Chemical-resistant/flame-resistant (CR/FR) garments

Tychem® 2000 SFR
Tychem® 2000 SFR offers 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 TP198T and TP199T are single-layer garments that offer 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.

Cut-resistant gloves

Tychem® PV350
Extremely durable, these 55-mil PVC gloves provide protection against chemicals, oils and greases. The cotton/ jersey knit lining adds comfort and flexibility while the textured grip makes it easier to grasp wet objects.

Tychem® NT470
These unlined, 15-mil nitrile gloves offer protection against a wide range of solvents, oils, hydrocarbons, greases and other chemicals. Thin and lightweight, Tychem® NT470 gloves are ergonomically designed to maximize comfort. The biseque finish grip makes working in humid environments easier.

Tychem® NPS70 CT
These 68-mil neoprene gloves, which feature an engineered yarn liner, provide protection against the dual risk of chemical exposure and cut. Tychem® NPS70 CT gloves provide ANSI level A5 and EN level E cut protection, as well as first-class defense against acids, caustics, solvents, greases and oils.

Cut-resistant gloves

Tychem® BT730
These unlined, 14-mil butyl gloves provide protection against a wide array of chemicals, including acids, ketones and alcohols. Light and thin with a “second-skin” feel, anatomical shape and rough surface, Tychem® BT730 gloves are comfortable and enable optimal grip. Impermeable for working in damp or greasy environments.

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 tears.

*Tychem® gloves and tape should not be used around heat, open flames, sparks or in potentially flammable environments. For professional use only.

Thermal gloves

Superior Glove® Dexterity® SKG/PXNE
Made with a blend of Kevlar® and Protek® yarns, these winter-lined arc flash gloves provide excellent heat and cut resistance. Neoprene palm coating features great FR properties and good oil resistance. These gloves provide 25 cal/cm² ATPV protection.

Ironclad Heatworx® Heavy Duty HW6X
These heavy-duty gloves have a full Kevlar® shell for extra heat protection and improved cut resistance combined with a Kovenex® palm liner and silicone-laminated Kevlar® blend finger sidewalls for extreme heat protection in critical areas.

For a full list of PPE solutions, visit SafeSPEC™.
Emergency response—fire, spill or release

Tasks
Stop hazardous material release and neutralize/clean up

Hazards
Chemical exposures
Particle exposures
Flash fire

**Available PPE options**

**Flame-resistant (FR) 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.

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NOTE: Certifications listed here are for Nomex® Comfort fabric; consult with garment manufacturer for garment certifications.

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

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NOTE: Certifications listed here are for Nomex® Essential fabric; consult with garment manufacturer for garment certifications.

**FR face mask made with Nomex®**
Made with Nomex® Comfort fabric, this FR face mask from PGI Safety may help meet guidance from the U.S. CDC for wearing masks in environments that require FR protection while social distancing. This FR face mask offers exceptional breathability and durability with inherent, built-in flame resistance that cannot be washed out or worn away.

FR face masks are for use while social distancing and may be used for other tasks identified by a site hazard risk assessment.

**Hoods made with Nomex® Nano Flex**
This lightweight and durable, hoods made with Nomex® Nano Flex help prevent potentially harmful particulates from being absorbed through the skin on the neckline and upper jaw, which are areas that historically are known to be the most vulnerable and least protected. When added to a firefighter hood composite structure, hoods made with Nomex® Nano Flex result in up to a 4X increase in particle barrier efficiency. This game-changing barrier protection is achieved without compromising thermal resistance, breathability, comfort or situational awareness.

DuPont is proud to collaborate with these manufacturers of hoods made with Nomex® Nano Flex:

- Fire-Dex
- PGI
- Viking
- Veridian

**Non-FR/chemical-protective garments**

**Tychem® 10000**
This garment offers 30 minutes of protection against more than 290 chemicals. “Single skin” fully encapsulated Level A garment offers broad chemical holdout.

Tychem® 10000 FR is certified to NFPA 1991 with chemical flash fire protection option and liquefied gas protection option requirements of NFPA 1991.

- NFPA 1991
- NFPA 70E® Cat 2

**Tychem® 6000**
Tychem® 6000 garments are made of a proprietary barrier film laminated to a Tyvek® substrate. The fabric offers at least 30 minutes of protection against more than 180 chemical challenges. Tychem® 6000 garments are strong, durable and lightweight.

- NFPA 1991
- NFPA 70E® Cat 2

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

**Chemical-resistant/Flame-resistant (CR/FR) garments**

**Tychem® 10000 FR**
“Single skin” fully encapsulated Level A garment offers broad chemical holdout.

This garment offers 30 minutes of protection against more than 290 chemicals. Tychem® 10000 FR is certified to NFPA 1991 with chemical flash fire protection option and liquefied gas protection option requirements of NFPA 1991.

- NFPA 1991
- NFPA 70E® Cat 2

**Tychem® 6000 FR**
Tychem® 6000 FR styles TP198T and TP199T are single-layer garments that offer 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.

- NFPA 1991
- NFPA 70E® Cat 2

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

DuPont is proud to collaborate with these manufacturers of turn-out gear made with Nomex®, Nomex® Nano and Kevlar®:

- Fire-Dex
- Innotex
- Quaker Safety
- Globe
- Lakeland
- Veridian
- Honeywell
- Lion

Hoods made with Nomex® Nano Flex result in up to a 4X increase in particle barrier efficiency. This FR face mask offers exceptional breathability and durability with inherent, built-in flame resistance that cannot be washed out or worn away.

**Turnout gear made with Nomex®, Nomex® Nano and Kevlar®**
Nomex®, Nomex® Nano and Kevlar® fibers can be found in each layer of most firefighter turnout gear. Together, these innovative fibers help provide proven protection, durability and comfort from the inside out.

Nomex®, Nomex® Nano and Kevlar® fibers help manufacturers create fire resistant liners, outer shells and accessories that not only stand up to the thermal hazards that firefighters may face, but also help them to get the job done without getting in the way of mobility.

For a full list of PPE solutions, visit SafeSPEC™.
Tasks
Stop hazardous material release and neutralize/clean up

Hazards
Chemical exposures
Particle exposures
Flash fire

Protection in the most extreme environments

For a full list of PPE solutions, visit SafeSPEC™.
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 Thermo-Man® (life-sized thermal burn injury evaluation) and Arc-Man® (arc flash 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® fabrics & gloves 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
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