



EVERYDAY
HEROES
DESERVE



TO COME
HOME SAFE

TYCHEM[®]
6000 FR

FOR
GREATER
GOOD[™]

EMERGENCY RESPONDERS AND INDUSTRIAL WORKERS DESERVE THE LATEST INNOVATION IN PROVEN PROTECTION.

To protect others, emergency responders need the best protection for themselves. Whether responding to a traffic accident or containing an industrial emergency, responders need a garment that will protect them from many hazards. Industrial workers facing the possible hazards of a flash fire, electrical arc flash and chemical exposure need a single garment with multiple types of protection. Choosing the best garment also means considering many other factors, like comfort, durability, cost effectiveness and safety. For these reasons, and others, DuPont has taken 40 years of industrial chemical and firefighting technology experience and innovation and created a single-layer suit—DuPont™ Tychem® 6000 FR.

TRIPLE HAZARD PROTECTION IN A SINGLE GARMENT.

Tychem® 6000 FR provides triple hazard protection from chemicals, flash fire and electric arc, combining the trusted chemical protection of DuPont™ Tychem® with the flame and arc flash protection of DuPont™ Nomex® into a single garment.

PROTECTING YOUR TEAM FROM A RANGE OF HAZARDOUS CHEMICALS.

From industrial chemical handling and remediation to first responder and secondary emergency response in industrial settings, we offer a complete range of chemical protective fabrics and garments. It's this knowledge and experience that's made us a leader in chemical protective garments. We've put this knowledge to work for at-risk personnel by creating Tychem® 6000 FR. This fabric delivers permeation protection against a broad range of toxic industrial chemicals and even chemical warfare agents.

Because protection matters most, Tychem® 6000 FR has been tested against >180 chemical challenges, of which 134 chemicals have exhibited no observed breakthrough after 480 minutes. This testing also demonstrates that Tychem® 6000 FR provides at least 8 hours barrier to 20 of the 21 chemicals found in ASTM F1001.

Note: Tychem® fabrics have different permeation performance. Please check SafeSPEC™ on our website for permeation data that meets your specific needs.

THE FIRST NAME IN FLASH-FIRE AND ELECTRIC ARC PROTECTION.

Nomex®, the name firefighters have valued for years, is integral to Tychem® 6000 FR garments. So Tychem® 6000 FR garments are flame resistant, increasing escape time from flash fire conditions.

Tychem® 6000 FR garments also offer protection for those who may face electric arc hazards associated with energized systems. If a high-energy electric arc event was to occur, Tychem® 6000 FR has been tested to provide burn injury protection with an arc rating of 15 cal/cm² Ebt.

Typical physical properties of Tychem® 6000 FR

Property	Value	Method
Basis Weight [oz./yd.]	8.4	ASTM D3776
Thickness [mils]	34	ASTM D1777
Grab Tensile (MD/CD) [lbf]	243/231	ASTM D5034
Trapezoidal Tear (MD/CD) [lbf]	51/34	ASTM D5733
Puncture-Propagation, Tear (MD/CD) [lbf]	28.7/31.8	ASTM D2582
Ball Burst [lbf]	167	ASTM D751



Tychem® 6000 FR garments are also available in low-visibility gray for law enforcement and clandestine applications.



TP198T
Respirator fit hooded coverall

TP199T
Respirator fit hooded coverall with attached socks and outer boot flaps

Available in orange or gray.

EVERY GARMENT IS CERTIFIED TO NFPA STANDARDS.

The Safety Equipment Institute certifies that Tychem® 6000 FR garments meet the requirements of NFPA 1992 *Standard on Liquid-Splash Protective Ensembles and Clothing for Hazardous Materials Emergencies* and NFPA 2112, *Standard on Flame Resistant Garments for Protection of Industrial Personnel Against Flash Fire*. In addition, Tychem® 6000 FR exceeds the Hazard Risk Category 2 requirement of 8 cal/cm² outlined in NFPA 70E, *Standard for Electrical Safety in the Workplace* with a 15 cal/cm² Ebt arc rating determined using ASTM F1959 and following special test requirements outlined in ASTM F1891.

And although Tychem® 6000 FR is constructed for heavy use, it's also lightweight and easy to wear.

NFPA 2112 Performance Tests	NFPA 2112 Criteria	Tychem® 6000 FR*
Vertical Flammability		
Char Length (MD/CD) [inches]	≤4	2.1/2.4 Pass
After Flame (MD/CD) [seconds]	≤2	0.8/0.6 Pass
Oven Shrinkage (MD/CD) [%]	≤10	5.4/7.8 Pass
Thermal Protective Performance (TPP)		
Contact [cal/cm ²]	≥3	15 Pass
Spaced [cal/cm ²]	≥6	17 Pass
Thermal Manikin		
Predicted Body Burn 3 sec. @ 2 cal/cm ² -sec.	≤50%	9.6% Pass

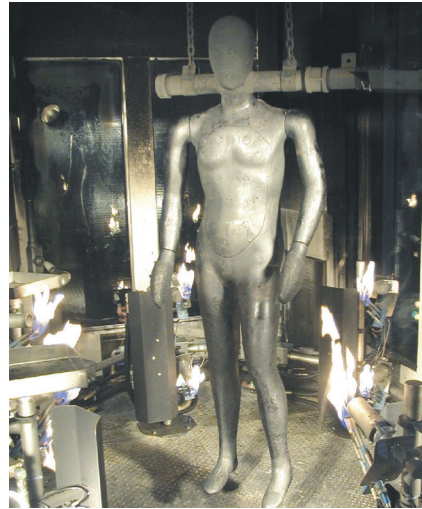
*Specimens conditioned and tested as specified in NFPA 2112. Also passes heat stability and thread stability tests.

A TEAM DEDICATED TO INNOVATION AND SAFETY.

Like the people who select, wear and value our garments, we're constantly looking for new ways to improve safety and protect lives. As conditions change, we're dedicated to developing the materials that can help you protect your team even under the most hazardous conditions.

DUPONT™ THERMO-MAN®—PUSHING PROTECTION TO THE LIMIT.

The increased thermal protection that DuPont™ Tychem® 6000 FR garments offer is clearly demonstrated in simulated fire testing using instrumented thermal manikins such as the DuPont™ Thermo-Man® system.



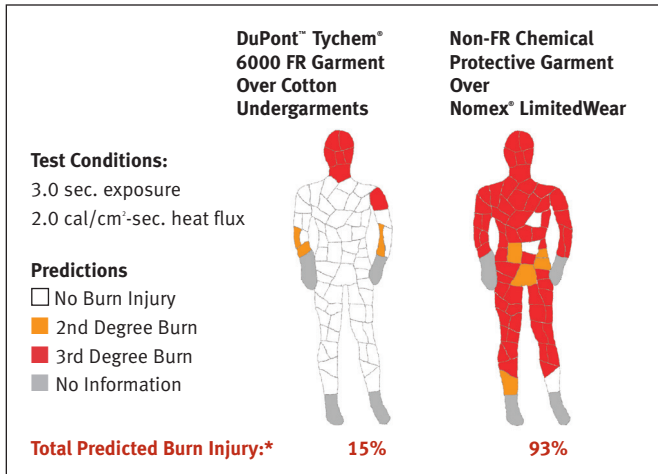
Thermo-Man® testing helps DuPont scientists and engineers design more protective garments.



This standard (non-flame resistant) chemical protective garment ignites and melts onto the manikin during a similar flame exposure, resulting in significantly higher levels of predicted burn injury. (Image 3 seconds after flame source removed.)



The Tychem® 6000 FR garment does not continue to burn after the flame exposure—maintaining a protective barrier to minimize burn injuries. (Image 3 seconds after flame source removed.)



*Total body results—images for front.

Note: The head was uncovered in these tests and contributed to 7% of the predicted body burn injury reported.

The sophisticated DuPont™ Thermo-Man® system consists of a life-size manikin with 122 thermal sensors used to predict level, extent and location of potential burns of garments in simulated flame exposures. Thermo-Man® tests are performed in accordance with the ASTM F1930 standard.

DuPont™ Tychem® 6000 FR has been certified to NFPA 2112, *Standard on Flame Resistant Garments for Protection of Industrial Personnel Against Flash Fire*.

To purchase Tychem® 6000 FR garments or for more information, please call 1-800-931-3456 or visit www.PersonalProtection.DuPont.com.



DuPont™ SafeSPEC™

Different jobs require different levels of protection. The DuPont™ SafeSPEC™ online tool helps you find what's right for you. Browse and compare products by brand, design or certification. The easy-to-read content, product images and technical data—including permeation results—allow you to make informed garment choices.

Now for mobile, too.

DuPont™ SafeSPEC™ for Mobile gives you all the same features and garment selection help on your mobile device. Available now from the App Store® and Google Play™.

SafeSPEC.DuPont.com

**DuPont Personal Protection
Customer Service:
United States 1-800-931-3456
Canada 1-800-541-2202
PersonalProtection.DuPont.com**

Tychem® 6000 FR garments are intended for flash-fire escape, electric arc and liquid splash protection only. Tychem® 6000 FR garments do not provide protection for any firefighting, hot liquid, molten-metal or long-duration thermal exposures.

All manikin tests are laboratory simulations of fire exposures. These laboratory simulations are severe and tax the performance properties of materials from which the clothing is made. The results of these tests are laboratory predictions of relative burn injury based upon several factors, including fabric type, fabric weight, garment styling and fit, number of launderings, exposure energy and exposure time. The results should not be used to predict garment performance in actual fire situations.

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

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