

# DUPONT™ TYCHEM® F

## DUPONT PERSONAL PROTECTION

DuPont™ Tychem® F garments are made of a proprietary barrier film laminated to DuPont™ Tyvek®. The fabric provides at least 30 minutes of protection against more than 180 chemical challenges, including chemical warfare agents and toxic industrial chemicals. Tychem® F garments are strong, durable and lightweight and are available in low-visibility gray fabric making them a preferred choice for law enforcement, emergency medical services (EMS) technicians and military personnel.

### Tychem® F Garment Features and Benefits:

- Taped seams provide strong chemical resistance against heavy liquid splashes
- The sewn seam is covered with a strip of compatible chemical-resistant tape through heat sealing
- Three-piece hood design with longer zipper that extends to chin for complete coverage of neck area with elastic for good fit around a respirator
- Storm flap covers zipper which can be sealed by the wearer with adhesive strip to prevent intrusion
- Elastic opening for tighter fit at wrist
- TF 145 T has elastic opening for tighter fit at ankle
- TF 169 T has attached socks



TF 169 T

### Styles Available

#### Coverall

TF 145 T GY xx 0006 TV<sup>3</sup>

TF 145 T GY xx 0006 00



Taped seams  
Attached hood (respirator fit)<sup>1</sup>  
Front zipper closure  
Storm flap with tape closure  
Elastic wrists  
Elastic ankles  
SM-5X

#### Coverall

TF 169 T GY xx 0006 TV<sup>3</sup>

TF 169 T GY xx 0006 00



Taped seams  
Attached hood (respirator fit)<sup>1</sup>  
Front zipper closure  
Storm flap with tape closure  
Elastic wrists  
Attached socks<sup>2</sup>  
SM-5X

<sup>1</sup> Respirator fit hoods are designed with a longer zipper, extending to the chin for complete coverage of the neck area. Standard hoods only extend to the neck.

<sup>2</sup> These Tychem® garments have attached socks made of the garment material. These attached socks must be worn inside protective outer footwear and are not suitable as outer footwear. These attached socks do not have adequate durability or slip resistance to be worn as the outer foot covering.

<sup>3</sup> Only TV option codes are TAA compliant.

## Physical Properties\* of DuPont™ Tychem® F

Property	Result	Method
Basis Weight	3.5 oz/yd <sup>2</sup>	ASTM D3776
Burst Strength — Ball	55 lbf	ASTM D3787
Tear Resistance — Trap Tear (MD/CD)	8 lbf / 7 lbf	ASTM D5733
Breaking Strength — Grab (MD/CD)	63 lbf / 69 lbf	ASTM D751
Wearing Apparel Flammability	Class 1	16 CFR 1610

\* Typical Values, not specifications.

These results are measured using the latest ASTM test methods. Results will vary due to the changes in test methods.

## Permeation Data for ASTM Recommended List of Chemicals for Evaluating Protective Clothing Materials (ASTM F1001)

Chemical Name	Physical Phase	Normalized Breakthrough Time (Minutes)
Acetone	L	>480
Acetonitrile	L	157
Ammonia	G	79
1,3-Butadiene	G	>480
Carbon disulfide	L	>480
Chlorine	G	>480
Dichloromethane	L	imm.
Diethylamine	L	>480
N,N-Dimethylformamide	L	>480
Ethyl acetate	L	>480
Ethylene oxide	G	>480
n-Hexane	L	>480
Hydrogen chloride	G	>480
Methanol	L	77
Methyl chloride	G	>480
Nitrobenzene	L	>480
Sodium hydroxide, 50%	L	>480
Sulfuric acid, 98%	L	>480
Tetrachloroethylene	L	>480
Tetrahydrofuran	L	464
Toluene	L	>480

**Index of codes:** >=greater than, **imm.**=immediate (<10 minutes), **nt**=not tested, **L**=liquid, **G**=gas. Normalized Breakthrough Time (NBT) shown in minutes.

Serged and/or bound seams are degraded by some hazardous liquid chemicals, such as strong acids, and should not be worn when these chemicals are present.

Seams and closures have less barrier than fabric.

Storm flaps: All taped seam coveralls have a single storm flap with a pressure-sensitive tape closure.

Permeation testing on industrial chemicals is in accordance with ASTM F739, *Standard Test Method for Resistance of Protective Clothing Materials to Permeation by Liquids or Gases Under Conditions of Continuous Contact*. All tests are conducted at room temperature unless otherwise noted. Reported results are Normalized Breakthrough Times defined by ASTM F739 as the time (in minutes) when the permeation rate reaches 0.1 µg/cm<sup>2</sup>/min.

The product information contained is current as of the date of publication, but may be revised as new information is developed. Before relying on any performance data for the purchase or performance of products, you should check [www.SafeSPEC.DuPont.com](http://www.SafeSPEC.DuPont.com) or contact DPP Customer Service at **1-800-931-3456** to determine whether there is new information that relates to your intended use or application of the product.

Please note that Tychem® fabrics have different permeation performance. Please check SafeSPEC™ 2.0 on our website for permeation data that meets your specific needs.

Note: Not all sizes available in all styles.

WARNING: Tychem® should not be used around heat, flames, sparks or in potentially flammable or explosive environments. Only Tychem® ThermoPro, Tychem® Reflector® and Tychem® TK styles 600T/601T (with aluminized outer suit) garments are designed and tested to help reduce injury during escape from a flash fire. Users of Tychem® ThermoPro, Tychem® Reflector® and Tychem® TK styles 600T/601T (with aluminized outer suit) 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.

## DuPont Personal Protection

### Customer Service:

United States 1-800-931-3456

Canada 1-800-387-9326



## DuPont™ SafeSPEC™ 2.0

[www.SafeSPEC.DuPont.com](http://www.SafeSPEC.DuPont.com)

*This information is based upon technical data that DuPont believes to be reliable. It is subject to revision as additional knowledge and experience are gained. DuPont makes no guarantee of results and assumes no obligation or liability in connection with this information. It is the user's responsibility to determine the nature and level of hazards and the proper personal protective equipment needed. The information set forth herein reflects laboratory performance of fabrics, not complete garments, under controlled conditions. It is intended for information use by persons having technical skill for evaluation under their specific end-use conditions, at their own discretion and risk. Anyone intending to use this information should first verify that the garment selected is suitable for the intended use. In many cases, seams and closures have shorter breakthrough times and higher penetration rates than the fabric. Please contact DuPont for specific data. These garments are intended for limited use and should be disposed of after single use. If fabric becomes torn, abraded or punctured, or if seams or closures fail, or if attached gloves, visors, etc. are damaged, end user should discontinue use of garment to avoid potential exposure.*

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