

DuPont™ Tychem® ThermoPro Garments

FREQUENTLY ASKED QUESTIONS

1. What situations are appropriate for Tychem® ThermoPro?

Tychem® ThermoPro was developed for situations involving potential liquid chemical splash and flash fire.

Tychem® ThermoPro garments are not suitable for all situations involving the potential for hazardous liquid chemical and flash fire. While these garments have been evaluated for thermal protection under simulated flash fire situations, there is the potential that flash fire conditions may exceed the performance capability of these garments.

Tychem® ThermoPro garments are only available as hooded coveralls. The interface between the Tychem® ThermoPro hood and respirator facepieces is not liquid-tight. Tychem® ThermoPro garments are not offered with attached gloves, so the glove-sleeve interface is also not liquid tight.

2. What is the level of thermal protection?

Tychem® ThermoPro garments are designed for short-term, flash fire escape protection and are certified as compliant with NFPA 2112 guidelines Standard on Flame-Resistant Garments for Protection of Industrial Personnel against Flash Fires (2001 Edition). These garments will not melt or drip when exposed to heat or flame. They provide permanent thermal protection that won't wash out or wear away.

3. What is the composition of the fabric?

Tychem® ThermoPro is an innovative new fabric from DuPont that utilizes proprietary Tychem® chemical barrier technology combined with NOMEX® thermal protective fabric technology.

4. Why does the permeation performance of Tychem® ThermoPro match the performance of Tychem® F?

Tychem® ThermoPro utilizes the same proprietary barrier technology as Tychem® F.

5. Is Tychem® ThermoPro as protective as my turnout gear?

No. Tychem® ThermoPro garments do not provide the same level of thermal protection as structural firefighting (turnout) gear. Tychem® ThermoPro was developed for liquid splash flash fire escape protection during hazardous materials operations. The garment is not intended for firefighting use.

6. What is the breathability of this garment?

The Tychem® ThermoPro fabric provides permeation protection against a range of toxic industrial chemicals and chemical warfare agents and provides flash fire escape protection. Tychem® ThermoPro fabric is not engineered to transport moisture vapor and liquid away from the body.



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7. Does Tychem® ThermoPro meet any NFPA standards?

The Safety Equipment Institute has certified that Tychem® ThermoPro is compliant with the requirements of NFPA 2112 and NFPA 1992. NFPA 2112 is the Standard on Flame-Resistant Garments for Protection of Industrial Personnel against Flash Fires (2001 Edition). NFPA 1992 is the Standard on Liquid Splash-Protective Ensembles and Clothing for Hazardous Materials Emergencies (2000 Edition). Tychem® ThermoPro garments are not compliant with the optional chemical flash fire escape requirements of NFPA 1992.

8. The Tychem® ThermoPro garment label states that the garment meets the flash fire escape requirements of NFPA 2112 but does not meet the Optional Flash Fire Escape requirements of NFPA 1992. What is the cause of this discrepancy?

NFPA 2112 sets limits on predicted body surface burns utilizing an instrumented manikin in a climate-controlled chamber exposed to a fireball of specific duration and energy as well as stringent conditions on vertical flammability, thermal conductivity and heat shrinkage. NFPA 1992 requires that the garment maintain complete liquid splash integrity after exposure to a confined propane conflagration as well as vertical flammability performance and thermal insulation. For NFPA 1992, the garment is subjected to a shower test and must not leak after simulated flash fire exposure. Tychem® ThermoPro

garments have minor damage that breaches the liquid integrity of the garment after this exposure.

9. Are Tychem® ThermoPro garments reusable?

Tychem® ThermoPro garments can be used until damaged or contaminated.

10. What colors will be available?

Tychem® ThermoPro garments will be initially offered in a high contrast orange. We are evaluating a low visibility gray color for situations where discretion is preferred.

11. Will Tychem® ThermoPro garments be offered as an encapsulated garment?

The initial offering will be two styles of hooded coveralls that will have respirator fit functionality. We are considering a future encapsulated offering.

12. Is this garment completely liquid tight?

The interface between the hood and respirator facepiece is not liquid-tight. At this time, we do not offer a garment with attached gloves, so the seal between the wrist and gloves is also not liquid-tight. For style TP188T which does have socks attached to the garment, the pant leg to boot interface is also not liquid-tight.

13. What level of chemical protection will it provide?

The permeation barrier performance of Tychem® ThermoPro is comparable to that provided by Tychem® F. Tychem®

ThermoPro provides at least one hour barrier to 20 of the 21 standard chemicals found in ASTM F 1001 and to chemical warfare vesicant and nerve agents of common concern. The full list of permeation data for Tychem® ThermoPro is provided in the Tychem® ThermoPro Permeation Guide.

14. How durable are Tychem® ThermoPro garments?

Tychem® ThermoPro garments are intended for multiple wears until damaged or contaminated. The garment provides adequate abrasion, puncture and tear resistance for a limited use garment.

15. Will this garment be heavier in weight than traditional chemical protective garments?

Tychem® ThermoPro fabric is 10% lighter than Tychem® TK fabric.

16. What type of gloves should be worn with Tychem® ThermoPro garments?

To protect the hands from heat and flame, wear outer gloves suitable for thermal protection, such as those compliant with NFPA 1971 or NFPA 1951. For additional chemical protection, an intermediate chemical barrier glove, such as an Ansell Barrier® or North Silver Shield worn over an inner, cotton or knit KEVLAR® glove may be considered.

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Customer Service:

Canada 1-800-387-9326

Mexico (52) 55 57 22 1222

United States 1-800-931-3456

www.PersonalProtection.DuPont.com



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