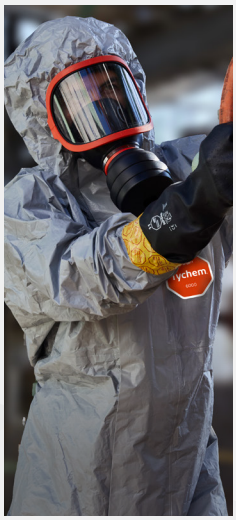
DUPONT
Tyvek | Tychem



The Tychem® DIFFERENCE

Superior Chemical and Biohazard Protection

Protective garments used for aggressive industrial chemicals must excel in barrier performance, durability, and wearability to minimise risks to operatives. DuPont™ **Tychem®** garments strike this balance, setting the standard for protection against chemical and biological hazards.

The importance of getting it right:

High-performance PPE suits offer protection against chemicals; however, wearing unventilated, potentially life-threatening gear can cause physiological and psychological stresses and other risks, like hyperthermia (heat stress).

The Tychem® portfolio:

DuPont™ **Tychem®** garments are a chemical protection must-have for thousands of industrial workers globally. Rigorous performance testing by third-party labs scrutinises Tychem® fabrics against a comprehensive range of chemicals, resulting in a detailed database of permeation results. This database encompasses various hazardous substances, including toxic liquids, gases, and warfare agents.

Tychem® garments with a proprietary barrier film laminated to a heavy-duty **Tyvek®** substrate offer excellent chemical permeation to an extensive range of chemicals, helping to protect personnel against numerous toxic industrial organic chemicals, highly concentrated inorganic chemicals (even under pressure), ultrafine particulates, biohazards, and specific chemical warfare agents.

Innovative Design Features

- Antistatic treatment (EN 1149-5) - on inside
- Stitched and over-taped seams with barrier tape for protection and strength
- EN 14126 (barrier to infective agents), EN 1073-2 (protection against radioactive contamination)

The Tychem® Difference

Comfort and mobility: Despite its robust protective features, Tychem® is designed with wearer comfort in mind. The lightweight and flexible fabric allows easy movement so workers can perform their tasks without hindrance.

Durability and reliability: PPE needs to withstand the rigours of the workplace, and Tychem® does just that. It is durable, puncture and tear-resistant, providing a longer lifespan and reliable protection over extended periods.

Sealed Seams for added protection: The coverall features sealed seams to enhance its protective capabilities, reducing the penetration of liquid chemicals through the stitched areas and maintaining the garment's integrity.

Tychem® Chemical Protective Garments: Utilized Across Different Industry Sectors

- Hazmat and Emergency Responders — 01
- Oil and Gas Industry — 02
- Mining/ Mineral processing — 03
- Waste Management — 04
- Shutdown and Maintenance — 05
- Cleaning Chemical Spill Clean-up — 06
- Chemical Industry — 07
- Pharmaceutical Industry — 08
- Disposal of Hazardous Materials — 09

Versatile Applications of Tychem® Protective Solutions

- ✓ Sarin & chlorine vapour protection
- ✓ Cleaning & disinfection protection
- ✓ Chemical/ Hazmat protection
- ✓ Heavy liquid & chemical splash protection
- ✓ Biological Hazard protection
- ✓ Emergency Response

Product Excellence:

Robust seams and zippers, varied sizes, well-designed hoods and accessories, and even the colour of the garment all play a significant role in keeping workers safe.

Key Products:

Tychem® 10000 (Tychem® TK):

- Tychem® TK offers the highest level of protection.
- Lightweight yet robust, encapsulated gas-tight garment.
- High visibility coverall with sizes ranging from SM to 2X
- Wide, anti-fog visor for undistorted, panoramic visibility.
- The bat-wing design allows the wearer to withdraw an arm to attend to the breathing apparatus.
- DuPont™ Tychem® 10000 Encapsulated Level A Suit.
- TK612(front entry) and TK613(rear entry) are certified to NFPA1990 (NFPA 1994, class 2) 2022 edition.
- Encapsulated Level A garment design is our highest level of protection from liquid splash and vapour/gas exposures for the wearer and respiratory equipment.
- Tychem® 10000 is specifically developed for protection against toxic, corrosive gases, liquids, and solid chemicals.

Accessories:

Specially designed for use with Tychem® apparel, Tychem® accessories can help offer enhanced protection for body parts that are more exposed to hazardous substances.

DuPont™ **Tychem®** offers different styles, including hoods, gloves, dissipative socks, boot flaps, shoe covers, aprons, coveralls, and fully encapsulated suits.

Tychem® 6000:

- Chemical protective clothing, Category III, Type 3-B, 4-B, 5-B, and 6-B
- Available in grey for visibility and sizes SM to 3X with attached dissipative socks.
- Hooded coverall with dissipative socks. Included are socks and boot flaps.
- It offers excellent chemical permeation to an extensive range of chemicals, helping to protect personnel against numerous toxic industrial organic chemicals, highly concentrated inorganic chemicals (even under pressure), particulates, biohazards, and specific chemical warfare agents.
- Tychem® 6000 garments are made from a lightweight and durable fabric (<500g per garment) with a proprietary barrier film laminated to a heavy-duty Tyvek® substrate. Learn **how Merck protects staff with the DuPont™ Tychem® 6000 FaceSeal chemical protective garment.**

Tychem® 4000: A Paradigm Shift:

- Chemical protective clothing, Category III, Type 3-B, 4-B, 5-B, and 6-B
- Fabric is considerably softer and lighter than the elastomeric-based materials typically in competitor garments.
- With an average garment weight of just 700 grams, the groundbreaking fabric's inherent pliancy and dimensional stability make it much more comfortable and easy to wear in the stressful conditions that operatives can typically face when working in hazardous environments.
- They achieve a barrier to permeation by a broad range of inorganic and organic chemicals.

Tychem® 2000:

- Chemical protective clothing, Category III, Type 3-B, 4-B, 5-B, and 6-B.
- Tychem® 2000 is used for splash or pressurised splash protection in various industrial environments.
- Tychem® 2000 C Plus garments utilise the strength of Tyvek® and a polymeric barrier coating to offer good permeation barrier protection against a wide range of inorganic chemicals and biological hazards (even under pressure).

Chemical and FR products

Chemical and fire-resistant products are essential for protecting individuals against hazardous materials and potential fire incidents, providing a critical barrier that helps prevent direct contact with harmful chemicals and enhances workplace safety.

These specialised garments are pivotal in minimising the risk of injuries; workers can perform their tasks in challenging environments with increased protection.

Tychem® protects against chemical hazards, offering primary and secondary protection:

Tychem® 2000 SFR:

- Offers chemical and secondary flame protection in a lightweight garment.
- Intended for wear over primary flame-resistant garments to prevent flash fires.
- Engineered for flame engulfment scenarios with extensive ASTM F1930 testing.
- Unique fabric technology that shrinks from flame without burning.
- Allows wearing over primary flame-resistant garments in the presence of chemical splash and flash fire hazards.

HAZMAT & Emergency Response Specialists

Emergency responders require superior protection when faced with diverse threats, from traffic accidents to industrial emergencies. Hazmat response situations demand different levels of PPE for chemical, biological, and radioactive threats.

DuPont™ Tychem® garments, including **Tychem® 10000** encapsulated Level A suits and **Tychem® 6000**, offer tailored solutions for specific threats, combining chemical and flame/arc flash protection. These garments, available in yellow, orange, and grey for visibility considerations, provide improved hazard protection.

The Tychem® 10000 TK suit is specifically designed for situations with immediate life and health risks. Protecting against toxic and corrosive gases, liquids, and solid chemicals, the high-performance garment suits industrial, emergency response, and domestic preparedness applications.

Rigorous testing has demonstrated Tychem® TK superiority, exceeding permeation resistance requirements for 15 chemicals in EN 943-2 and showing no breakthrough for 90% of the 300 chemicals tested for up to eight hours.

Have you got all the answers or do you need help?

When selecting personal protection against aggressive industrial chemicals, specifiers must be aware that protective clothing is a final line of defence against direct physical contact with highly dangerous chemical substances.

Because of this, great care must be exercised when choosing the optimum protective garments. Just because a garment is recorded as having 'passed' a static test under controlled laboratory conditions doesn't necessarily mean it is appropriate for a given work situation.

Get the answers now - get professional advice.

A global leader in personal protection, DuPont has been addressing the world's safety needs with the best in technologies and innovations for over 40 years.

Individual operating conditions can vary enormously, and each circumstance or event must be considered on its own merits to permit the optimum consideration of risk, protection, durability, and comfort. Don't simply rely on choosing protective coveralls (or any other PPE) from a website or literature.

The optimum and safest choice of personal protection requires sound judgment, a detailed understanding of risk, and a comprehensive knowledge of personal protection principles, technical standards, and equipment perforance.

DuPont Personal Protection offers comprehensive support in protective garment selection & chemical risk assessment, as well as training on the use of protective clothing.

A customised selection service is available for all Tyvek® and Tychem® protective clothing products.

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