



# Standard Practice for Conformity Assessment of Protective Clothing Worn by Operators Applying Pesticides<sup>1</sup>

This standard is issued under the fixed designation F2962; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reapproval. A superscript epsilon ( $\epsilon$ ) indicates an editorial change since the last revision or reapproval.

## 1. Scope

1.1 This practice establishes the conformity assessment requirements for limited use and reusable garments that are worn while spraying field strength liquid pesticides. The testing requirements for supplier's declaration of conformity and certification are specified in Specification F2669.

1.2 *This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this standard to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.*

## 2. Referenced Documents

### 2.1 ASTM Standards:<sup>2</sup>

F1494 Terminology Relating to Protective Clothing  
F2669 Performance Specification for Protective Clothing Worn by Operators Applying Pesticides

### 2.2 ISO Standards:<sup>3</sup>

ISO/IEC 17000 Conformity assessment—Vocabulary and general principles  
ISO/IEC 17011 General requirements for accreditation bodies accrediting conformity assessment bodies  
ISO/IEC 17025 General requirements for the competence of testing and calibration laboratories  
ISO/IEC 17065 General requirements for bodies operating product certification systems  
ISO 27065 Protective clothing—Performance requirements for protective clothing worn by operators applying liquid pesticides

## 3. Terminology

### 3.1 Definitions:

<sup>1</sup> This test method is under the jurisdiction of ASTM Committee F23 on Personal Protective Clothing and Equipment and is the direct responsibility of Subcommittee F23.30 on Chemicals.

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<sup>2</sup> For referenced ASTM standards, visit the ASTM website, [www.astm.org](http://www.astm.org), or contact ASTM Customer Service at [service@astm.org](mailto:service@astm.org). For *Annual Book of ASTM Standards* volume information, refer to the standard's Document Summary page on the ASTM website.

<sup>3</sup> Available from American National Standards Institute (ANSI), 25 W. 43rd St., 4th Floor, New York, NY 10036, <http://www.ansi.org>.

3.1.1 *audit*—systematic, independent, documented process for getting records, statements of fact or other relevant information and assessing them objectively to determine the extent to which specified requirements are fulfilled.

3.1.2 *accreditation*—third-party attestation related to a conformity assessment body conveying formal demonstration of its competence to carry out specific conformity assessment tasks.

3.1.3 *certification*—the process of providing assurance that a product, process or service conforms to one or more standards or specifications.

3.1.4 *certification body*—organization that performs product certification activities.

3.1.5 *certified product*—any product that has successfully been tested and found to be compliant by an appropriately accredited certification body.

3.1.6 *certified product listing*—a publicly accessible listing of certified products.

3.1.7 *conformity assessment*—demonstration that specified requirements relating to a product, process, system, person or body have been fulfilled.

3.1.8 *desk audit*—limited-scope examination of documents and records, away from the place of action.

3.1.9 *evaluation*—determination of the significance or condition by careful appraisal and study.

3.1.10 *inspection*—examination of a product, product design, service, process or manufacturing facility and determination of conformity with specific or (on the basis of professional judgment) general requirements.

3.1.11 *listed*—inclusion in a publicly accessible list published by an accredited certification body.

3.1.12 *mark of conformity*—legally registered certification mark applied by or issued under the procedures of a third-party certification system for a product, process or service that is in conformity with specific standards or other technical specifications.

3.1.13 *product*—one unit of a particular model.

3.1.14 *protective clothing provider*—the commercial entity is financially and legally responsible for placing the product in commerce and for the consistent performance of the product as claimed.

3.1.15 *quality assurance*—all the planned and systematic activities implemented within the quality system that can be demonstrated to provide confidence that a product or service will fulfill requirements for quality.

3.1.16 *suppliers declaration of conformity*—the procedure by which a first party or supplier conveys assurance that the object of conformity fulfills specified requirements.

3.1.17 *surveillance*—systematic iteration of conformity assessment activities as a basis for maintaining the validity of the statement of conformity.

3.1.18 *third-party*—independent of the person or organization that provides the product and of the user interests in that object.

3.1.19 *third-party certification*—conformity assessment activity that is performed by a person or body that is independent of the person or organization that provides the object and of user interests in that object.

3.2 For definitions of other protective clothing-related terms used in this test method, refer to Terminology F1494.

## 4. Classification

4.1 The conformity assessment process for the three levels is based on potential risk. The protective clothing garment shall be classified in accordance with Specification F2669 into one of three levels: Level 1, Level 2, or Level 3. Table 1 in Specification F2669 summarizes requirements for each of the three levels. The details are included in the respective sections.

## 5. Supplier’s Declaration of Conformity

### 5.1 Level 1 Garments:

5.1.1 Garments shall meet or exceed testing requirements for Level 1 garments specified in Specification F2669. Any changes to the product require re-testing.

5.1.2 Protective clothing provider shall be responsible for the testing of Level 1 garments. Testing can be done by the manufacturer, protective clothing provider, or under contract with a laboratory.

5.1.3 A report included in Annex A1 shall be completed by the protective clothing provider for all Level 1 garments. The report shall be on file with the protective clothing provider, and made available to the public upon request.

5.2 Protective clothing providers shall not claim that a product is compliant with any part of Specification F2669 unless the product is compliant with all requirements of the standard.

## 6. Product Certification

### 6.1 Level 2 and Level 3 Garments:

6.1.1 Level 2 and Level 3 garments shall be certified by an accredited certification body that meets the criteria in 7.1.

6.1.2 The certification report shall include data and labeling information specified in Specification F2669. The certification

body shall assign distinct certification identification for each model of garment certified. The certification body’s label, symbol, or identifying mark of conformity and code assigned to the certified garment shall be part of the product label, or shall be immediately adjacent to the product label.

6.2 Protective clothing providers shall not claim that a product is compliant with any part of Specification F2669 unless the product is compliant with all requirements of the standard and Specification F2669.

6.3 Protective clothing providers shall not be authorized to use any label or reference to the certification body on products that are not compliant with all applicable requirements of this specification and of Specification F2669 - 09.

## 7. Certification Body

7.1 The certification body shall be accredited for the scope of personal protective equipment in accordance with ISO Guide 17065.

7.2 Testing shall be conducted by an independent laboratory that is accredited in accordance with ISO Guide 17025.

7.2.1 The independent laboratory shall have the standard, Specification F2669, listed in its scope of accreditation.

7.3 The certification body and the laboratory accreditations shall be issued by accreditation organizations operating in accordance with ISO 17011.

7.3.1 The certification body shall not be owned or controlled by protective clothing providers or vendors of the product being certified.

7.3.2 The certification body shall be primarily engaged in certification work and shall not have a monetary interest in the product’s ultimate profitability.

7.4 The certification body shall make publicly available a listing of all products which have been certified to Specification F2669-09.

7.5 The certification body shall refuse to certify products to this standard that do not comply with all applicable requirements of this standard and Specification F2669-09.

7.6 The contractual provisions between the certification body and the protective clothing provider shall specify that certification is contingent on compliance with all applicable requirements of the current edition of this specification and of Specification F2669.

NOTE 1—It is important that the contractual provisions covering a certification program contain clauses advising the protective clothing provider that if requirements change, the products are brought into compliance with the new requirements by a stated effective date through a compliance review program involving all currently certified products. Without the clauses, certifiers would not be able to move quickly to protect their name, marks of conformity, or reputation. A third-party certification program would be deficient without these contractual provisions and the administrative means to back them up.

7.7 The certification body shall not offer or confer any conditional, temporary, or partial certifications.

7.8 The certification body shall require the protective clothing provider to establish and maintain a quality assurance program that meets the requirements of the certification body.

Prior to issuing certification, an initial onsite quality audit shall be performed by the certification body.

7.9 As part of the post-marketing evaluation, surveillance, and enforcement, the certification body shall obtain a sample certified product at random from the open market.

7.9.1 The sample product shall be evaluated at least once every two years by the certification body to verify the product's continued compliance in order to assure that the materials and components are consistent with the materials and components that were tested by the certification body during initial certification.

7.9.2 The certification body shall conduct an annual desk audit of the protective clothing provider to ensure the manufacturing quality assurance systems continue to meet the quality requirements of the certification body.

7.9.3 The certification body shall require the supplier to submit specific details on any proposed change(s) to a certified model prior to implementation of a change. The certification body shall evaluate the change(s) to determine the impact to the model and whether testing shall be required to demonstrate continued compliance to the standard.

## **8. Product Marking**

8.1 Permanent labels and user instructions shall be in accordance with ASTM **F2669-09**. Any warnings or extra care required shall be clearly visible to the user.

## **9. Keywords**

9.1 certification; PPE

## **ANNEX**

### **(Mandatory Information)**

#### **A1. REPORT OF TESTING PERFORMED TO ASTM **F2669****

A1.1 See **Fig. A1.1**.

**REPORT OF TESTING PERFORMED TO ASTM F 2669**

Garment Protective clothing provider, name or identification: \_\_\_\_\_

Identification code: \_\_\_\_\_

**Material Information:**

Fiber Content: \_\_\_\_\_ Trade Name (if applicable): \_\_\_\_\_

Material:  Woven  Nonwoven  Multicomponent  Other \_\_\_\_\_

**Design Information:**

Type of Garment:  Re-usable chemical protective clothing  Limited use chemical protective clothing

Long pant  Long-sleeved shirt  Coverall  Other \_\_\_\_\_

**Laundering Procedure:** Only for Reusable chemical protective clothing

**Edition of the standard:**

**Test Results:**

Test	Test Standard	Mean	Std. Dev.	Tested by	
% Penetration (material)					
% Penetration (seam)					
Tensile strength Warp					
Tensile strength Filling					
Seam tensile strength					
Tear resistance Warp					
Tear resistance Filling					

Practical Performance Test results:

The garment closures prevent gapping.  Yes  No

If no, describe the problem:

\_\_\_\_\_

Date: \_\_\_\_\_ Completed by: \_\_\_\_\_ Title: \_\_\_\_\_

**FIG. A1.1 Report of Testing Performed to ASTM F2669**

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