ISO 16602
Frequently Asked Questions

**Why do I need to know about ISO 16602?**

It will make it easier for you to do your job better. Currently in North America there is no comprehensive standard for assessing the performance of chemical protective clothing for workers facing chemical hazards in industrial situations.

Safety professionals, who bear responsibility for the selection of chemical protective clothing (CPC), must rely upon manufacturer’s claims and their own experience to select the appropriate garments. The performance of chemical protective clothing can vary by manufacturer. There is no established means to compare the performance of garments from one manufacturer to the next. Nor is there a common way to describe the overall performance of the protective ensemble or the performance of the ensemble’s components against different chemical threats. ISO 16602 provides an objective means of defining the performance of chemical protective apparel worn by workers in situations involving potential chemical hazards.

**Why is getting the right product so important?**

Chemical protective garments are available in a wide variety of fabrics and designs. The options are intended to provide protection ranging from chemical vapors and gases, to liquid splash, spray or mist, and to particles and aerosols. Unlike other forms of personal protective equipment (PPE) the performance of chemical protective clothing is not highly regulated in the U.S. or Canada. Some standards exist for hazardous materials emergencies, but little regulation exists regarding routine industrial applications. This void in recognized standards for industrial applications can lead to a complex and potentially confusing environment for those who must select the appropriate apparel for a given hazard or application.

The selection of appropriate chemical protective clothing depends upon an accurate hazard assessment. The nature of the chemical hazard, the work activity and the environment in which the work is being performed must be match the fabric, seam and design of the protective clothing. If the worker is not adequately protected against the hazard he/she may face, the worker could be injured. Conversely, clothing that over-protects can impose unnecessary burdens on the worker, such as heat stress, lack of vision, restricted mobility, and increased physical exertion, as well as higher purchasing costs for the employer.
What is ISO 16602?

ISO 16602 is an international standard for classifying chemical protective clothing performance. It is a tool to help safety & occupational health professionals select appropriate chemical protective clothing.

Established by the multi-national International Organization for Standardization (ISO), the requirements outlined in ISO 16602 provide a common language for chemical protective clothing performance. Although only introduced in 2007, ISO 16602 is already recognized and accepted internationally. It is clear that ISO 16602 will become the common global language for expressing CPC performance.

The common global classification system and the standard presentation of the performance data that ISO 16602 provides helps to simplify the selection of chemical protective apparel by safety & occupational health professionals. ISO 16602 provides a standard presentation of the performance data. This standard format allows objective evaluation and comparison of CPC performance among possible options, instead of just relying upon vendor’s claims.

How is chemical protective clothing classified?

The ISO 16602 standard is based upon a system of Types and Classes. Chemical protective clothing is categorized into one of six different Types. The garment Type designation is based upon the physical state of the hazard.

Each of the six Types has requirements for various mechanical, barrier and basic flammability properties. Barrier to the specific chemical hazards, mechanical durability and ease of ignition of the garment materials and components are assessed with lab tests. The results of these barrier and mechanical durability tests fall into a unique performance “Class”. Different combinations of barrier and durability tests are specified under each Type.

Does ISO 16602 replace my need to do a hazard assessment?

No. ISO 16602 is an international standard for classifying chemical protective clothing performance. It is a tool to help safety & occupational health professionals select appropriate chemical protective clothing. But the selection of appropriate chemical protective clothing still depends upon an accurate hazard assessment. The nature of the chemical hazard, the work activity and the environment in which the work is being performed must be matched with the fabric, seam and design of the protective clothing selected.

What ISO 16602 is not.

The system of performance requirements outlined in ISO 16602 is not a test method. Existing standard test methods are used to measure performance levels. It is not a
certification program. While it does set minimum levels of performance for each Type, ISO 16602 does not set maximum levels of performance.

What should I look for?

Performance tested garments should be clearly labeled stating compliance with ISO 16602. Since third-party certification is not required with ISO 16602, safety and occupational health professionals should request validation reports from the garment manufacturer for all performance claims made for their chemical protective clothing.

**How do I learn more about ISO 16602?**

To learn more about the ISO 16602 standard itself, visit [www.iso.org](http://www.iso.org).

To learn more about ISO 16602 compliant chemical protective garments and how to obtain them, please contact DuPont Personal Protection Customer Service at 1-800-931-3456.