

# EN 1149: Electrostatic properties of protective clothing

These garments are used in environments where there is a risk of explosion (ATEX environments).

The outer fabric of the garment is anti-static.

Annex II, art. 2.3. of the ATEX directive 99/92/CE concerning the protection of workers likely to be exposed to the risk of explosive atmospheres says: "Workers must be provided with appropriate working clothing consisting of materials which do not give rise to electrical discharges that can ignite explosive atmospheres".

Under the scope of the PPE manufactureres Directive 89/686/Ce a series of protective clothing standards have been developed relating to electrostatic properties:



EN 1149

## EN 1149-5:2008 - Performance requirements

Anti-static PPE are certified to EN 1149-5 as this standard covers the performance requirements and refers tot the choice of 2 different test methods (EN 1149-1 or EN 1149-3)

## EN 1149-1:2006 - Measurements of surface resistivity

This test method is most appropriate for materials for which the electrostatic dissipative behavior is based on surface conductivity (for instance containing surface conductive yarns or a homogenous conductive outside PVC coating layer). This method is not appropriate for core conductive fibres.

## EN 1149-3:2004 - Measurements of surface resistivity

This test method is referenced for materials for which the electrostatic dissipative behavior is based on core conducting fibres but can also be used for surface conducting materials

In the 1149 series, there is also an EN 1149-2 (measurement of the electrical resistance through a material, the vertical resistance) which is used as a test method in EN ISO 11611 (welders clothing) and which is also mentioned in Annex H of EN 469:2005. A full garment test is under development and will be issued as EN 1149-4.

