

EN 1149 – Protective clothing. Electrostatic properties

European standard for protective clothing with antistatic characteristics. The clothing protects against sudden discharges of electrostatic energy and should be worn whenever there is a risk that static sparks may ignite inflammable substances such as gas and oil.

The article should cover all other materials that do not provide protection against static electricity. Thin attachments such as labels, reflectors and the like, must be attached permanently.

Conductive parts, such as buttons and zips, are permitted provided that they are covered completely by the protective material against discharges of electrostatic energy.

EN1149-1 measure of surface resistivity
EN1149-3 measure of charge decay

European standard for garments that protect against electrostatic charge where there is a risk of explosion e.g. in refineries.

An electrostatic dissipative material shall ensure that the distance between the conductive threads contained in the material must not be greater than 10mm.

- The garments must permanently cover all material that does not provide electrostatic protection.
- Thin additions, such as labels and reflectors, must be permanently sewn on. No loose-hanging parts are permitted.
- Elements that conduct electricity (zips, buttons, etc) are permitted if they are completely covered by the electrostatic protective material.

When using these garments, the wearer must be properly earthed. The resistance between the wearer and the earth shall be less than $10^8\Omega$. This can be achieved by wearing suitable footwear. Antistatic footwear approved to EN ISO 20344 or EN 20345 must be used.

Electrostatic dissipative protective clothing shall not be opened or removed in flammable or explosive atmospheres or while handling flammable or explosive substances. Wear and tear, laundering and any contamination can affect the electrostatic dissipative performance of the electrostatic dissipative protective clothing. The garment shall permanently cover all non-compliant material during normal use. The garment should only be used in

rooms with increased oxygen content following approval from the relevant safety engineer. **Do not** make alterations to the garments. Minor embroidery or transfer is permitted on fabric certified to EN ISO 11612 and shall be permanently attached to the garment so that separation is avoided.