

IS 15742:2007 - Clothing Made of Limited Flame Spread Materials and Material Assemblies Affording Protection Against Heat and Flame

Limited flame spread materials and material assemblies are used in clothing in order to reduce the possibility of their burning and thereby itself constituting a fire hazard. These include clothing such as ladies' wear made of synthetic fibres and children wear of all kinds and also other protective clothing where protection against heat and fire mainly due to accidental contact with small igniting flames is required in circumstances where there is no significant heat and fire hazard. The performance of such clothing is expressed in terms of a limited flame spread index.

Consumers expect **flame-resistant clothing** to offer **maximum protection** against fire hazards, ensuring that the garment **does not ignite** or burn easily in dangerous situations. Key quality parameters include **durability** to withstand repeated use and washing, **comfort** for long hours of wear, and the ability to maintain its **flame-resistant properties** over time.

IS 15742:2007 ensures that **limited flame spread materials** meet specific **performance requirements**. This performance requirement includes **that** All textile materials shall have a limited flame spread level 1, 2 or 3 when tested in accordance with IS 15758 (Part 4) and All textile material shall have a limited flame spread Index of 2 or 3 when tested in accordance with IS 15758 (Part 4).

This standard explains the requirements of the **Limited Flame Spread Index 1 to 3 along with the details of procedures for durability to cleanse or wet, manufacturers information and sampling requirement**.

IS 15742:2007 ensures that **limited flame spread materials** meet specific **performance criteria** for heat and flame protection. The standard sets guidelines for testing fabric's **flame resistance**, ensuring that it **self-extinguishes** once the ignition source is removed.