

IS 17609:2021 is the Indian Standard that specifies the requirements for fibre ropes made from a combination of polyester and polyolefin dual fibres. This standard is identical to ISO 10556:2009, ensuring international alignment.

Scope and Application:

The standard covers three types of rope constructions:

- **Type A:** 3-strand hawser-laid ropes.
- **Type L:** 8-strand braided ropes.
- **Type T:** 12-strand braided ropes.

These ropes are commonly used in industries such as marine, agriculture, and construction due to their strength and durability.

Material Composition:

The ropes are constructed from:

- **Polyester Fibres:** Continuous multifilament, high-tenacity industrial-grade polyester, known for heat and light resistance.
- **Polyolefin Fibres:** Polypropylene or a blend of polypropylene and polyethylene.

The polyester content must constitute at least 40% by mass of the rope, balancing strength and flexibility.

IS 17609:2021 outlines specific requirements for:

- **Linear Density:** Corresponding to the rope's diameter, ensuring consistency in size and weight.
- **Minimum Breaking Force:** Defined for each reference number, indicating the rope's tensile strength in both dry and wet conditions.

These specifications ensure the ropes perform reliably under various environmental conditions.

Quality Control Order (QCO):

The Ministry of Textiles issued the "Ropes and Cordages (Quality Control) Order, 2024," mandating that fibre ropes of polyester/polyolefin dual fibres comply with IS 17609:2021.

This order comes into effect on April 1, 2025, for medium and large enterprises, and on July 1, 2025, for small and micro enterprises. Products must bear the Standard Mark under a license from the Bureau of Indian Standards (BIS), ensuring adherence to quality and safety standards.