

Summary of IS 17777 : 2021 (Textiles Dyed knitted or crochet fabric made from synthetic fibres Specification)

IS 17777:2021 specifies the requirements for dyed knitted or crochet fabrics made from synthetic fibers such as polyester, nylon, or acrylic. These fabrics are commonly used in garments and other textile products. The standard ensures that the materials meet performance and safety criteria while providing durability and aesthetic appeal.

Consumers expect these fabrics to have consistent quality, durability, and functionality. Key parameters include:

- **Physical Appearance:** Free from defects like ladders, dropped stitches, or uneven dyeing.
- **Performance:** High bursting strength, resistance to pilling, and stability in dimensions after washing.
- **Safety:** Acceptable pH levels and absence of harmful substances.
- **Color Fastness:** Resistance to fading or staining during exposure to light, washing, or perspiration.
- **Customization:** Flexibility in construction, mass, and design as per buyer-seller agreements.

IS 17777:2021 provides a comprehensive framework to ensure these fabrics meet the expected quality parameters:

1. **Manufacture and Finish:** Specifies requirements for yarn quality, free from spinning defects, and mandates clean, odor-free finished fabrics.
2. **Performance Tests:** Includes stringent criteria for bursting strength, dimensional stability, and pilling resistance, with tolerances specified in Table 1.
3. **Color Fastness and Safety:** Ensures resistance to fading and compliance with pH levels through standardized testing methods (IS/ISO 105 series).
4. **Marking and Packaging:** Requires clear labeling of batch, GSM, fiber composition, and other relevant details. Packaging ensures the fabric is clean, dry, and protected during transport.
5. **Sampling and Inspection:** Defines sampling protocols (IS 4905) and quality benchmarks to ensure conformity in bulk production.