

## **IS 17355 : 2020- Agro textiles – Propylene spun bonded non-woven mulch mat for agricultural and horticultural applications**

IS 17355:2020 specifies the requirements for polypropylene spun bonded non-woven mulch mats designed for use in **agriculture and horticulture** to control **weed growth**. These mats are made from fine polypropylene filaments, heat-bonded without binders, to create a material that blocks light to prevent weed growth but allows the passage of water, air, and fertilizers.

Key quality parameters **expected by consumers** for mulch mats include:

- **Durability:** Resistance to UV light and tear strength to endure outdoor conditions.
- **Weight and Thickness:** Adequate density and thickness to ensure durability and effective weed control.
- **Environmental Safety:** Low ash content and the use of approved pigments for minimal environmental impact.
- **Ease of Use:** Lightweight and easy to install, with a defined roll length for convenience.

The IS 17355:2020 standard outlines specific requirements to ensure the product's **quality and performance**:

- **Physical Requirements:** Sets minimum mass, thickness, and tear strength values to ensure durability and effectiveness in weed suppression.
- **UV Stability:** Requires a minimum retained tensile strength after UV exposure to verify the mat's resistance to sunlight degradation.
- **Marking and Packing:** Specifies labelling requirements for traceability and packaging standards to protect rolls during transport.
- **Testing and Sampling:** Details standardized testing methods for characteristics such as tensile strength and ash content, as well as criteria for sampling and conformity to ensure consistent quality across production batches .