



## **IS 17358: Part 2: 2020 Agro Textiles — Fencing Nets for Agriculture and Horticulture Purposes**

### **1. Definition of the Product**

The product covered under IS 17358: Part 2 is defined as "fencing nets" made from High Density Polyethylene intended for agricultural and horticultural use. These nets are typically used for perimeter fencing to secure agricultural fields, plantations, and gardens. Fencing nets play a crucial role in safeguarding agricultural and horticultural assets from external threats. As the demand for durable and reliable fencing solutions increases, HDPE fencing nets have become a preferred choice for farmers and horticulturists due to their lightweight nature and ease of installation.

### **2. Quality Parameters Expected by Consumers**

Consumers expect fencing nets to meet certain key quality parameters to ensure their durability, effectiveness, and long-term functionality. The primary quality expectations are:

- **Strength and Durability:** The fencing net must withstand environmental factors, such as wind, rain, UV exposure, and animal pressure, without degrading or losing its shape.
- **UV Resistance:** Fencing nets must be resistant to ultraviolet (UV) rays to prevent degradation under prolonged sun exposure, ensuring longevity and sustained protection.
- **Chemical Resistance:** The material must be resistant to common agricultural chemicals, including pesticides and fertilizers, to ensure that it remains intact and effective in the field.
- **Maintenance of Colour:** The colour of fabric of net should be maintained during long exposure to sun.

### **3. How IS 17358 Part 2 Addresses These Expectations:**

The Standard specifies the use of high-quality material typically High Density Polyethylene (HDPE), that are UV stabilized by adding suitable UV stabilizer. The Standard also specifies the Mass per Unit Length, Linear Density and the Heat Shrinkage of the monofilament yarn. This ensures that the nets retain their strength and integrity for extended periods. The Standard specifies the minimum average Breaking Strength and minimum Burst Pressure. It also specifies the Breaking Strength after UV exposure which ensures the strength of the net to prevent tearing and damage from environmental conditions. The Standard also specifies the dimensions of eyelets. The Standard also specifies the requirement of Colour Fastness to Artificial Light which ensures that how well the fabric of net maintains its colour when exposed to artificial light sources.