

<u>IS 17358 (Part 1): 2020 - Agro Textiles — Fencing Nets for Agriculture and Horticulture Purposes — Specification Part 1 Fencing Nets Made from Extruded Polymer Mesh</u>

1. Product Definition

HDPE fencing nets are intended for use in **agriculture**, **horticulture**, **forestry**, **and animal husbandry** to prevent entry by stray animals and unauthorized individuals, enhancing security in these areas. The nets not only define boundaries but also serve an aesthetic purpose by maintaining a well-organized appearance. **HDPE** material is chosen for its durability, resilience, and ability to withstand outdoor elements without corroding, making it suitable for prolonged use in various environments.

2. Quality Parameters

The IS 17358 (Part 1): 2020 outlines specific quality parameters to ensure that HDPE fencing nets deliver the durability and functionality that users expect:

- UV Stabilization: Given the outdoor usage, HDPE nets are UV-stabilized, incorporating UV stabilizers that meet the specified requirements in terms of tensile strength and weather resistance after prolonged UV exposure.
- Strength and Classification: The fencing nets come in three classifications—light-duty, medium-duty, and heavy-duty, each with its own GSM (grams per square meter) and tensile strength specifications. The durability tests ensure that the nets retain at least 85% of their tensile strength after exposure to UV light for 144 hours.
- Mesh Aperture Shape and Dimensions: The fencing nets are available in hexagonal, diamond, and square mesh shapes. These shapes allow users to choose based on specific needs, such as whether the net is required for larger animal deterrents or for general boundary marking. Each type's mesh dimensions are tightly regulated to ensure consistency and functionality.
- Customizable Colors and Sizes: The document permits customization of color and dimensions (width and length) based on buyer-seller agreements. Such flexibility allows the product to be tailored to varied applications, whether in agriculture, forestry, or landscaping.
- Labeling and Packaging: Each roll of HDPE fencing is labeled with crucial details like manufacturer information, net type, length, width, weight per square meter, aperture size and shape, and batch number for quality assurance and traceability.
- HDPE fencing nets adhere to specific manufacturing and testing requirements. **IS 10146** ensures that the polyethylene used in these nets is safe and effective for long-term outdoor use. Tests cover aspects like **mesh size, joint and filament thickness, tensile strength, elongation**, and **UV resistance** to ensure the product meets quality expectations for durability and safety in use.

3. Keywords

HDPE Fencing Nets, UV Stabilization, Corrosion-Resistant, Lightweight, Easy Installation, Durable, Agriculture, Horticulture, Tensile Strength, Mesh Aperture Shape.

This specification ensures that fencing nets meet user expectations for durability, usability, and effectiveness in protecting agricultural and horticultural spaces.