TECHNICAL DATA SHEET (TDS)

Flame Retardant Polyethylene (PE) Film

1. Product Identification

Product Name: Flame Retardant PE Film
Manufacturer: Kuber Polyfilms
Material: Flame Retardant Polyethylene (PE)
Color: Transparent
Form: Roll

2. Product Description

Flame Retardant PE Film by Kuber Polyfilms is manufactured using premium-grade polyethylene compounded with industry-approved flame-retardant additives. The film is designed to reduce flame propagation and enhance safety in environments where fire resistance is critical. The material exhibits self-extinguishing behavior once the flame source is removed.

3. Standard Product Specifications

Parameter	Specification	Test Method
Thickness	50 microns (±10%)	ASTM D6988
Width	18 inches (≈457 mm)	Internal
Material	Flame Retardant PE	Internal
Color	Transparent	Visual
Density	0.92 – 0.94 g/cm³	ASTM D1505
Film Type	Blown PE Film	Internal

4. Mechanical Properties (Typical Values)

Property	Typical Value	Test Method
Tensile Strength (MD)	≥ 12 MPa	ASTM D882
Tensile Strength (TD)	≥ 10 MPa	ASTM D882
Elongation at Break (MD)	≥ 300%	ASTM D882
Elongation at Break (TD)	≥ 450%	ASTM D882
Tear Resistance (MD)	≥ 80 g	ASTM D1922
Tear Resistance (TD)	≥ 100 g	ASTM D1922
Dart Impact Strength	≥ 100 g	ASTM D1709

5. Flame Retardant Performance

• Self-extinguishing behavior after removal of flame source
• Reduced flame spread
• Minimal molten dripping
• Controlled smoke generation
Compliance Potential: UL 94 (V-0 / V-2), ASTM E84, FMVSS 302 (subject to formulation and third-party testing)

6. Applications

Construction vapor barriers, cable and wiring insulation wraps, pallet covers for chemical and oil transport, automotive interior protection films, tunnel and mining tarpaulin covers.

7. Available Options

UV stabilized, corona treated (single or double side), anti-static or anti-fog additives, custom colors. Custom thickness range: 10–475 microns. Custom width up to 4000 mm.

8. Storage & Handling

Store in a cool, dry place away from direct sunlight and open flames. Recommended storage temperature: 5°C – 35°C.

Disclaimer: The information provided in this Technical Data Sheet is based on typical laboratory values and is intended for reference only. Actual performance may vary depending on application, processing conditions, and formulation. Users should conduct their own suitability testing before final use.