

FLAME RETARDANT TPU FILM

A high-spec TPU film engineered to achieve UL 94 V-0 flame retardancy with self-extinguishing capabilities, delivering low-smoke safety and superior processability for mission-critical applications.

AFEL SOLUTION

Custom Dimensions

Thickness: 0.1-1.0mm
Width: 1000-1500mm

Can be fully customized for your application.

Appearance Options

Standard: Translucent, White
Custom: Available

Safety Certified

Flammability: V2~V0
Meets global safety and environmental standards by ASTM UL94

Key Performance Advantages

Environmental Excellence

Does not contain halogens, does not release corrosive gases, significantly reduces smoke concentration and toxicity in fire situations.

Self-Extinguishing & Safety Compliance

Flame-retardant performance with self-extinguishing properties, Meets strict global fire safety standards with top-tier ASTM UL94 V2~V0 flame retardancy.

Low Smoke Density & Toxic Emission Reduction

Flame-retardant formulation significantly suppresses smoke generation and reduces the release of toxic gases.

Key Applications

Protective Clothing Fuel Cell liners
Textile Lamination Industrial Hoses
Firefighting Safety Gear

Certifications & Processing

ASTM UL94 RoHS & REACH
High-Freq Welding Halogen Free
Thermoforming



AFEL

Physical Properties

Thickness: 0.3mm				
Properties	Test Method	Unit	Results	Remark
Color	White			
Surface type	Both side matt			
Hardness	ASTM D2240 A	Shore A	85	±2
Tensile Strength	ASTM D 412	MPa	MD 584	50 ↑
			TD 549	
Tear Strength	ASTM D 1004	MPa	MD 7.8	5.0 ↑
			TD 8.1	
Elongation	ASTM D 412	%	MD 480	450 ↑
			TD 460	
Modulud at 100%	ASTM D 412	MPa	MD 73	5.0 ↑
			TD 71	
Modulud at 300%	ASTM D 412	MPa	MD 86	5.0 ↑
			TD 80	
Flame-retardant TEST	ASTM UL94		V0	

* There are typical values and should not be used for establishing specifications