

DuPont™ Oasis® 120TWT561

Composite Film

Product Description

Oasis® 120TWT561 is a heat sealable composite film that is made using DuPont high strength polyimide film and fluoropolymer designed to meet the light weight wire requirements of AS22759/80-92. 120TWT561 film has a unique balance of excellent electrical, thermal durability, and chemical resistance properties, including improved hydrolytic stability, that make it ideal for the next generation of aerospace wire designs.

120TWT561 film possesses excellent bonding characteristics to itself and to other fluoropolymer-containing materials, while providing low adhesion to metal conductors for ease of stripping. These unique bonding characteristics should provide a wide operating window for producing modern composite wire insulations.

This material can be processed on most taping machines designed to wrap polyimide based films around electrical conductors.

Applications

Aerospace Wire and Cable

- airframe wires
- hookup wires
- general purpose aircraft wires

Specialty Wires

- magnet wire
- satellite wire

Packaging

Oasis® 120TWT561 composite film is available in various standard roll packages. Custom roll packages can be produced with applicable upcharges. Contact your regional sales representative for additional information.

Additional product information, processing requirements and the safe handling of Oasis® can be found in Bulletin EI-10169.

Table 1. Typical Properties of Oasis® 120TWT561 Film

Property	Units	Typical Value	Test Method
Thickness	mil	1.2	ASTM D374
Density	g/cc	1.78	ASTM D1505
Tensile Strength	kpsi	31	ASTM D882
Tensile Modulus	kpsi	500	ASTM D882
Elongation	%	60	ASTM D882
Moisture Content	%	<1.0	DuPont Test Method
Heat Seal Strength at 350°C	g/cm	500	DuPont Test Method
Seal Initiation Temperature	°C	280	DuPont Test Method
Dielectric Strength	V/mil	4150	ASTM D149
Dissipation Factor at 1 kHz	–	0.010	ASTM D150
Dielectric Contant at 1 kHz	–	2.85	ASTM D150
Volume Resistivity	ohm-cm	10 ¹⁶	ASTM D257
Yield	ft ² /lb	90.1	DuPont Test Method

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For more information on DuPont™ Oasis® composite film or other DuPont products, please visit our website.

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