

# DuPont<sup>™</sup> Oasis<sup>®</sup> 120TWT561

## Composite Film

### Description

Oasis<sup>®</sup> 120TWT561 is a heat sealable composite film that is made using DuPont high strength polyimide film and DuPont fluoropolymer designed to meet the requirements of AS22759/80-92. Oasis<sup>®</sup> 120TWT561 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.

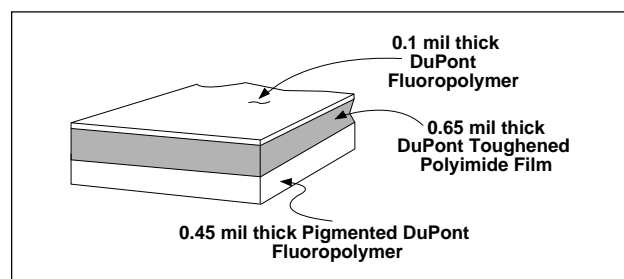
Oasis<sup>®</sup> 120TWT561 possesses excellent bonding characteristics to itself and to other fluoropolymer-containing materials, while providing low adhesion to metal conductors. These unique bonding characteristics should provide a wide operating window for producing modern composite wire insulations.

Processing of this material can be done on most wire taping equipment capable of taping standard polyimide films. The typical properties of Oasis<sup>®</sup> 120TWT561 are listed in **Table 1** below.

### Packaging

Oasis<sup>®</sup> tapes are available in three different roll configurations: pad rolls, universal wound rolls, and *Step-Pac*<sup>®</sup> rolls.

**Figure 1. Oasis<sup>®</sup> 120TWT561 Heat Sealable Composite Film (material cross-section)**



**Table 1**  
**Typical Properties of Oasis<sup>®</sup> 120TWT561**

Property	Unit	Typical Value	Test Method
Thickness	mil	1.2	ASTM D-374, Method D
Density	g/cc	1.78	ASTM D-1004-66-1981
Tensile Strength	kpsi	22.0	ASTM D-882-83, Method A
Tensile Modulus	kpsi	400	ASTM D-882-83, Method A
Elongation	%	60	ASTM D-882-83, Method A
Moisture Content	%	<1.0	DuPont 5204
Heat Seal Strength at 350°C	g/cm	500	DuPont 5210
Seal Initiation Temp.	°C	280	DuPont 5210
Dielectric Strength	V/mil	4500	ASTM D-149-81
Dissipation Factor at 1 kHz	—	0.010	ASTM D-150-81
Dielectric Constant at 1 kHz	—	2.85	ASTM D-150-81
Volume Resistivity	ohm-cm	10 <sup>16</sup>	ASTM D-257-78 (1983)
Yield	ft <sup>2</sup> /lb	90.1	DuPont 5217

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**Caution:** Do not use in medical applications involving permanent implantation in the human body. For other medical applications, see "DuPont Medical Caution Statement," H-50102.

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