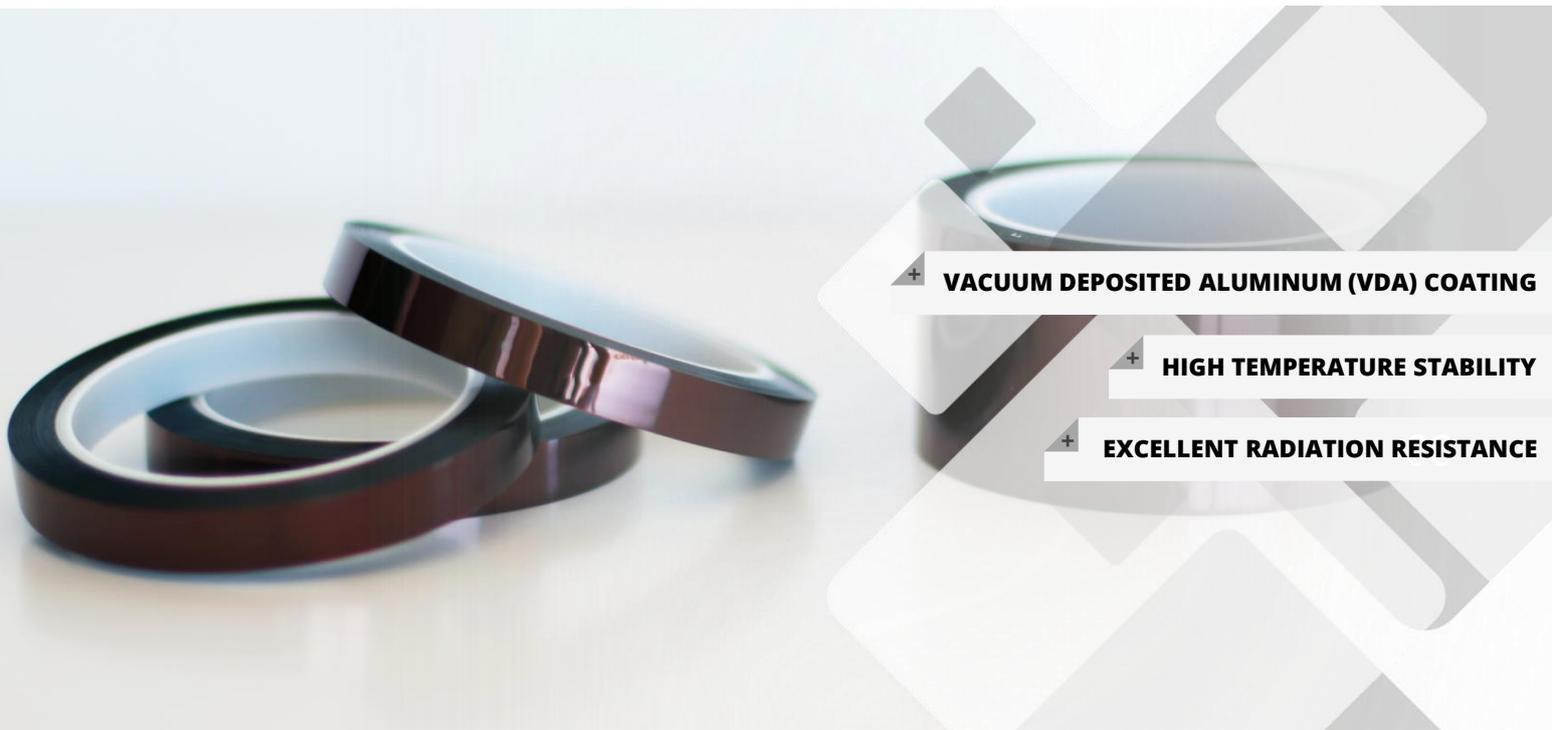


# LINQSTAT™ PIT1N-Alum Series

1-mil Polyimide Film with Sputtered Aluminized Coating



+ **VACUUM DEPOSITED ALUMINUM (VDA) COATING**

+ **HIGH TEMPERATURE STABILITY**

+ **EXCELLENT RADIATION RESISTANCE**



## PRODUCT DESCRIPTION

1 mil thick high temperature resistant polyimide film with an ultra thin coating of sputtered aluminum



## PRODUCT APPLICATION

Used as a cost effective radiative transfer barrier, with high temperature stability for Multilayer Insulation blankets, EMI shielding or as first or second surface mirror.



## PRODUCT FEATURES

Sputtered aluminized film with best absorption, emittance and cost combination. Offers high temperature stability and burn resistance



## PRODUCT DESCRIPTION

**CAPLINQ Linqstat™ PIT1N-Alum Series** is a high performance, high-temperature resistant aluminized polyimide film, formed by sputtering aluminum onto polyimide using an aluminum vacuum deposition method. This combination of materials allows that one side is an insulation side and the other is conductive.

**CAPLINQ Linqstat™ PIT1N-Alum Series** combines these two materials to give a very heat resistant, mechanically and chemically stable, radiation-resistant, and self-extinguishing product that has very high thermal conductivity and EMI shielding.

**CAPLINQ Linqstat™ PIT1N-Alum Series** is used in a number of applications, including as a first surface mirror for multilayer insulation (MLI) blankets, EMI shielding, electromagnetic shielding tape and flexible etching wire.



## PRODUCT APPLICATION



### ► Applications

- Best absorption/ emittance/ cost combination
- Cost effective radiative transfer barrier
- Excellent high temperature stability
- Excellent burn resistance
- Multilayer Insulation (MLI) blankets
- EMI shielding
- Flexible Etching Wire
- First or second surface mirror





## PRODUCT FEATURES

UNCURED PROPERTIES	UNIT	VALUE
Color	-	Amber/Gold
Adhesive Type	-	None
Film (Backing) Thickness	µm (mil)	25.4µm (1mil)
Aluminum Coating Thickness	µm (mil)	0.1µm (0.004mil)
<b>Tensile Strength</b>		
Vertical (MD)	MPa	>200
Horizontal (TD)	MPa	>175
<b>Elongation</b>		
Vertical (MD)	%	>75
Horizontal (TD)	%	>75
Surface Resistivity	ohm/sq	>3
First surface solar absorptance	α	<0.14
First surface solar emittance	ε <sub>H</sub>	<0.035
Typical first surface	α / ε	4 - 5
Aluminum surface resistivity	Ω/square	<1
Intermittent Temperature Range	°C °F	-250°C to 400°C -420°F to 750°F
Continuous Temperature Range	°C °F	-250°C to 400°C -420°F to 750°F
UL-94 Flammability Rating*		V-0

### ▶ PRODUCT CROSS SECTION



**A** Aluminum Coating: 0.1µm (0.004mil)

**B** Polyimide Film: 25.4µm (1mil)

### ▶ PRODUCT NOMENCLATURE

**PIT:** Polyimide Tape / Film

**1:** 1 mil Backing Thickness

**N:** No Adhesive (Film only)

**Alum:** Aluminized Coating

*\*Note: Since UL classification must be tested for every unique film backing, thickness and adhesive combination, the listed UL rating is only an expected outcome if this material were to be tested. Please contact CAPLINQ to discuss options for obtaining UL certification*

# LINQSTAT™ PIT1N-Alum Series

1-mil Polyimide Film with Sputtered Aluminized Coating



Specialty Chemicals, Plastics & Products



## PRODUCT FEATURES

### STORAGE AND HANDLING

Linqstat™ PIT1N-Alum Series Film is supplied in rolls and should be kept in a cool (10°C – 25°C) dry place (40% – 75% humidity) away from direct sunlight or temperature extremes. Once removed from packaging it should be protected against dust and other impurities. When applying Linqstat™ PIT1N-Alum Series Film to any surface, be sure that the surface is free of oil, powder, dust or release agent that might interfere with its adhesion to the substrates.

For safe handling information on this product, consult the Material Safety Data Sheet, (MSDS).

### DATA RANGES

The data contained herein may be reported as a typical value and/or range values based on actual test data and are verified on a periodic basis.

**The above figures are typical material properties only and are not to be used for product specification purposes.** To generate a specification for this product, please contact our Quality Manager and request a copy of the current stock specification. The information and recommendations supplied in this document are believed to be accurate but no guarantee of their accuracy is made; they are for guidance only and should not be construed as a warranty. All implied warranties are expressly disclaimed, including without limitations any warranty of merchantability and fitness for use. It is recommended that purchasers before using this product conduct their own tests to determine whether the product is suitable for their particular purposes under their own operating conditions.



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