

# LINQTAPE™ PIT1N-FEP616-Series

1 mil polyimide film with double-sided 0.1 mil FEP coating



## PRODUCT DESCRIPTION

High temperature resistant insulating film of 1 mil thick polyimide film with double-sided 0.1 mil heat sealable FEP coating.



## PRODUCT APPLICATION

Used for high temperature electrical applications which require heat bonding polyimide film. Well suited for wrapping cables and magnet wires.



## PRODUCT FEATURES

High performance polyimide film with excellent electrical and temperature insulating properties. Can be used in applications up to 400°C (752°F).

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1 mil polyimide film with double-sided 0.1 mil FEP coating



Specialty Chemicals, Plastics & Products



## PRODUCT DESCRIPTION

**LINQTAPE™ PIT1N-FEP616 Series** is a general purpose, high-temperature resistant HN polyimide film that is coated on both sides with a 0.1 mil fluorinated ethylene propylene or FEP copolymer.

**LINQTAPE™ PIT1N-FEP616 Series** is coated with an FEP fluoropolymer coating (F46) emulsified solution and sintered at high temperature to turn general purpose HN polyimide into an FN polyimide. By applying the FEP coating to the HN polyimide film, it is converted to a heat bondable film, which in turn provides a superior moisture barrier and improved chemical resistance.



## PRODUCT APPLICATION



**LINQTAPE™ PIT1N-FEP616 Series** is heat sealable and is therefore often used in applications that require polyimide films to be heat-bonded, or in applications that require moisture and/or chemical resistance beyond what our standard HN polyimide films can offer. It is extremely well suited, and extensively used for wrapping cable and magnet wire.

A further list of applications includes, but is not limited to tubing, heater circuits, heat sealable high-temperature bags, automotive diaphragms and manifolds, H-C grade motors and other applications that can make use of the high temperature, electrically insulating, heat-bondable properties of polyimide FN films.



### ► Applications

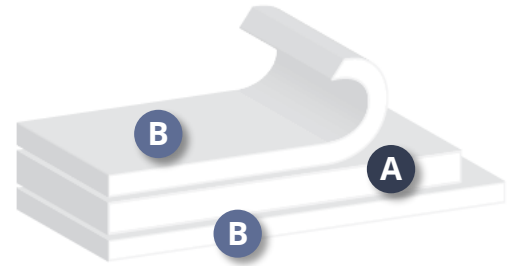
- Cable and magnet wire wrapping
- Automotive diaphragms and manifolds
- H-C grade motors
- Tubing
- Heat sealable high temperature bags
- Heater circuits



## PRODUCT FEATURES

TYPICAL PROPERTIES	UNIT	VALUE
Color		Amber
Film (Backing) Thickness	µm (mil)	25.4 micron (1mil)
FEP Layer Thickness	µm (mil)	2.5 micron (0,1 mil)
Total Thickness	µm (mil)	30.5 micron (1.2mil)
Adhesion to Steel	N/25mm oz/inch	5.8 21.0
Tensile Strength	Mpa psi	165 24,000
Elongation	%	40
Dielectric Strength	V/mil	>5000
Dielectric Constant (@ 1kHz)		3.5
UL-94 Flammability Rating Polyimide Backing Special Layer		V-0 No
Temperature Resistance	°C °F	260 500

### ▶ PRODUCT CROSS-SECTION



**A** Polyimide Film: 25.4 µm

**B** FEP Coating: 2.5 µm

### ▶ PRODUCT NOMENCLATURE

**PIT:** Polyimide Tape / Film

**1:** 1 mil Backing Thickness

**N:** No adhesive

**FEP616:** Double-sided 0.1 mil FEP coating

## STORAGE AND HANDLING

**LINQTAPE™ PIT1N-FEP616-Series** 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.

## 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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