

## **Product Data Sheet**

Updated: September 2015 This datasheet replaces all previous versions

# P-423 NAT

### 2-MIL BONDABLE PTFE FILM TAPE

#### PRODUCT DESCRIPTION

P-423 NAT has outstanding bond ability without a liner. The bondable backing offsets the anti-stick property of a conventional PTFE film for uses requiring the coating to wet out and adhere to the tape surface.

#### **FEATURES**

- Provides unsurpassed dielectric strength for its thickness over the widest range of temperatures for high voltage insulation.
- Excellent conformability.
- Tough, high abrasion and shows great tear resistance.
- A treatment of the film helps to create bond ability without the use of an interliner.

PRODUCT	AANATBUATIAN	
PRODUCT	CONSTRUCTION	

PTFE FILM

Bondable Treatment

#### APPLICATION

- The ideal tape where electrical varnishes and epoxy resins are used.
- High adhesion to the backing makes P-423 NAT ideal for use as continuously served harness wrap as a base for resin coatings.
- Our bondable backing is directly printable for conventional printing methods and inks.
- Recommended for use in wrapping applications over small diameters and where coatings are required to bond to the tape surface, as barrier insulation and outer protective insulating wraps, as ground and phase insulation, for bundling end turns, insulating connections in small high frequency, fine wire wound resin encapsulated motors and for aerospace service.

#### **PROPERTIES, CERTIFICATIONS AND SPECIFICATIONS**

Backing Material	Bondable PTFE Film		
Adhesive	Cured silicone		
Color	Gray		
	Imperial	Metric	
Total Tape Thickness	3.9 mil	0.1 mm	
Tensile Strength	30 lb./in.	51.6 N/10 mm	
Elongation	140%	140%	
Adhesion to Steel	29 oz./in.	3.2 N/10 mm	
Dielectric Strength	9,400 volts	9.4 kV	
Insulation Class CSA	311°F	155°C	
Insulation Class UL	356°F	180°C	
Certifications	UL-510 & CSA C-22-2		
Government Specifications	ASTM D2686/CID A-A-59474C TYPE II, CLASS I (Replaces obsolete MIL-I-23594C)		
McDonnell Douglas Specification	PS 17115		

\*CAUTION: The above are typical values and should not be used in writing specifications. Customer is responsible to ensure product meets intended application requirements before approved for use.

UL component Recognition Guide OANZ2, File E20392, CSA C-22.2. RoHS Compliant.



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#### **GENERAL STORAGE CONDITIONS**

Best stored between 50°F-80°F / 10°C-27°C, 25-50% relative humidity; out of direct sunlight.

#### PRECAUTION REMINDER

Surface should be clean, free of oil, moisture and dirt before applying. Pressure-sensitive adhesive tapes may require pressure by roller, hand or press when applying. Not doing so may affect the general properties and appearance. Please inspect your surface prior to application; this tape may not adhere well to extremely uneven or distorted surfaces. Please remember to allow adequate time for full adhesive strength.

#### WARRANTY INFORMATION

The following is made in lieu of all warranties, expressed or implied, including the warranty of merchantability and fitness for a particular or ordinary purpose. NITTO DENKO AMERICA warrants that its products meet the applicable specifications at the time of shipment from our warehouse and NITTO DENKO AMERICA's sole obligation shall be to replace any such quantity of the product which fails to meet NITTO DENKO AMERICA's AMERICA's specifications, or to issue a credit for such merchandise, for a period of six (6) months from the date of shipment.

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