

### **Product Data Sheet**

Updated: November 2016 This datasheet replaces all previous versions

# **P-422 NAT**

#### 2-MIL PTFE FILM TAPE

#### PRODUCT DESCRIPTION

P-422 has unsurpassed dielectric strength in volts-per-mil, coupled with outstanding thermal rating and conformability. This tape is perfect for insulating connections in high voltage coils and power cables.

#### **FEATURES**

- Chemically inert with excellent high temperature resistance.
- Operates over a wide range of temperatures: 250°F to 500° F/121.1°C to 260°C.
- Resists destruction from most chemicals, including acids, solvents, fuels, and most alkalies.
- Economical while still exhibiting high performance features.

#### PRODUCT CONSTRUCTION

PTFE FILM
CURED SILICONE

#### **APPLICATION**

- High temperature capabilities make P-422 ideal for use in the cure process of composite parts, as a release wrap on rollers in paper and textile mills and food processing plants, release ply on molds in the plastics and chemical industries and is suitable for use in high heat autoclave applications in the aerospace market.
- Recommended for use as an anti-vibration cushion, a gasket for flanges, joints and clamp connectors and as a high temperature release tape surface on heat sealer bars and rollers.
- Used to provide a slick surface for the quick movement of materials and/or reduce equipment wear.

#### PROPERTIES, CERTIFICATIONS AND SPECIFICATIONS

Backing Material	PTFE Film	
Adhesive	Cured silicone	
Color	Gray	
	Imperial	Metric
Total Tape Thickness	3.9 mil	0.1 mm
Tensile Strength	28 lb./in.	49 N/10 mm
Elongation	133%	133%
Adhesion to Steel	26 oz./in.	2.8 N/10 mm
Dielectric Strength	10,500 Volts	10.5 kV
Insulation Class CSA	356°F	180°C
Insulation Class UL	356°F	180°C
Certifications	UL-510 & CSA C-22-2	
Government Specifications	ASTM E595/ ASTM D2686/ CID-A-A-59474C Type I, Class 1(Replaces obsolete MIL-I-23594C Type I, Class 1)	
Boeing Specifications	BAC 5034 Type IV/ BAC 5157/ BAC 5241/ BAC 5332/ BAC 5548/ BAC 5597/ BAC 5578	

<sup>\*</sup>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.





For additional information or support, please visit our website at www.nittousa.com or call toll free 800-755-8273

© Nitto, Inc. 2016 Document Code: PDS-P-422 NAT-11-16



## **Product Data Sheet**

Updated: November 2016 This datasheet replaces all previous versions

#### **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 warrants for a period of one (1) year from the date of delivery that products sold to the Customer will be free of defects in workmanship and material. Such warranty will apply only if the Customer notifies Nitto in writing of these defects in reasonable detail, within two (2) weeks after a defect is discovered or should have been reasonably discovered by the Customer. This warranty does not extend i) to products which have been subject to misuse or neglect, ii) to products which have been altered or repaired by personnel other than personnel employed by Nitto or employed by Customer and certified by Nitto or iii) to damage caused, directly or indirectly, by the operation or maintenance performed by any untrained individuals.

THIS WARRANTY IS EXCLUSIVE AND IN LIEU OF ANY OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION, WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, AND ANY OTHER WARRANTIES ARE HEREBY DISCLAIMED AND EXCLUDED.

If the warranty in the first paragraph is breached, the exclusive remedy of Customer and the exclusive obligation of Nitto will be as Nitto elects: to repair or replace the defective product within a reasonable period of time. Return of products to Nitto is allowed only after a Return Material Authorization Number (RMA) has been issued by Nitto. Such RMA will be issued after Nitto receives the notice described in the first paragraph. No shipments of returned products will be accepted without an RMA number. Repair or replacement of the products returned to Nitto will occur only after Nitto has received the returned products and determined that the returned goods were in breach of warranty. Customer will bear all expenses and risk of loss in connection with the return of any products, and Nitto will reimburse Customer for the cost of surface transportation to Nitto of returned products.

IN NO EVENT WILL NITTO BE LIABLE FOR ANY CONSEQUENTIAL, INCIDENTAL, OR SPECIAL DAMAGES WHICH ARISE IN CONNECTION WITH THE FAILURE OF, OR DEFECTIVE PERFORMANCE OF, ANY PRODUCT SOLD OR THE BREACH OF WARRANTY EVEN IF NITTO HAD NOTICE OF THE POSSIBILITY HEREOF.

Customer's recovery of any equitable amount or any kind will not be greater than the amount paid for this product. Customer hereby waives all other remedies, statutory or otherwise including the remedies of specific performance or replevin.

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

For additional information or support, please visit our website at www.nittousa.com or call toll free 800-755-8273

© Nitto, Inc. 2016 Document Code: PDS-P-422 NAT-11-16