# Swift Textile Metalizing

### **Electrically Conductive Nylon Rip Stop,** Ni Aq Coated (W077NS)

Electrically conductive nylon rip stop fabric for applications requiring durable, lightweight material with low electrical resistance and the ability to withstand harsh environmental exposure. Additional material characteristics include excellent breathability and dimensional stability.

#### **Features & Benefits**

Our proprietary EnCap™ metalization process completely encapsulates each fiber in metal at the molecular level to deliver a durable. permanent, unbreakable bond while maintaining the mechanical properties of each fabric.

This process enables STM to deliver best-inclass conductivity, durability, reliability and repeatability for maximum performance and lifecycle value. As a result, STM materials are suitable for a variety of industries and applications.







Defense



Aerospace

- RF signal reduction
- Secure work environments
- Shielded enclosures



Architectural Shielding



Medical

- Directed energy mitigation
- Wi-Fi signal isolation
- Mobile device security



Security



Telecom

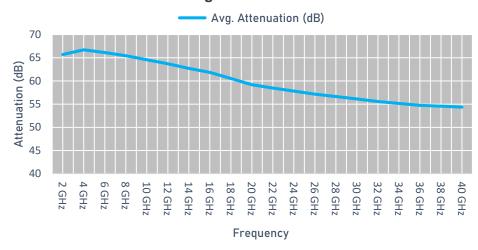
- Flexible circuits/sensors
- Component shielding
- EMI management

#### Shielding Effectiveness - W077NS

#### **Shielding Effectiveness**

This graph shows the typical shielding effectiveness of W077NS as measured with a free space focused beam test method at an industry-leading third party laboratory.

Tested by Compass Technology Group using test method CTG-TM-0101-2020 CTG-Focused-Beam-Shielding-Standard.pdf



| Material Specification – W077NS  |                                     |                                  |             |
|----------------------------------|-------------------------------------|----------------------------------|-------------|
| Base fabric: Nylon rip stop      |                                     | Base fiber: Nylon 6 or Nylon 6,6 |             |
| Material coating: Silver, Nickel |                                     | Width: 36–37", nominal           |             |
| Property                         | Typical Value                       |                                  | Test Method |
| Shielding effectiveness @ 1 GHz  | -65 dB                              |                                  | ASTM D4935  |
| Water vapor transmission         | 830 g/m² - 24 hours                 |                                  | ASTM E96    |
| Thickness                        | .004"                               |                                  | ASTM D1777  |
| Weight                           | 1.7 oz./yd²                         |                                  | ASTM D3776  |
| Electrical resistance            | 0.06 Ω/sq.                          |                                  | ASTM D4496  |
| Tear strength                    | 6.5 lbs./in.                        |                                  | ASTM D5587  |
| Tensile strength                 | 12,000 psi, machine direction       |                                  | ASTM D412   |
|                                  | 10,000 psi, cross machine direction |                                  | ASIM D4IZ   |

Note: The data presented above is based on test samples from multiple production batches and is representative of typical material properties.

## Call or email us today to discuss your project











Swift Textile Metalizing, LLC is a U.S. manufacturing company that specializes in the design, development and production of a wide range of electrically conductive and reflective metalized fabrics used in products that provide protection of people and equipment from Electromagnetic Interference (EMI), Radio Frequency Interference (RFI) and Static Discharge.

Since 1955 Swift Textile Metalizing has provided standard and custom conductive fabrics for aerospace, defense and commercial applications. STM brings together technology, innovative engineering and customer involvement to provide dynamic application solutions. STM's goal is to continually improve our industry leadership through the highest standards in product performance and service.



Swift Textile Metalizing, LLC P.O. Box 66, 23 Britton Drive, Bloomfield, CT 06002-0066 Phone: 860.243.1122 Fax: 860.243.0848 Email: sales@swift-textile.com Website: www.swift-textile.com AS9100D & ISO 9001:2015 Certified