

NyloGard[®] 2451SA NyloGard[®] 2451SP





- Operating temperature up to +80°C (+176°F)
- Superior abrasion resistance
- Excellent cut-through resistance
- Available in standard or customized die-cut designs
- Multiple adhesive systems available
- Various backer paper materials and configurations available
- Version available with additional polymeric film layer for increased dielectric properties

Typical Applications

- Plastic Wire Troughs
- Fluid Reservoirs
- Tube, hose and cable assemblies
- Low Surface Energy Plastics
- Areas of complex geometry or difficult fixation
- EV battery pack busbars, brackets, covers



Our manufacturing sites are certified ISO 9001, IATF 16949, or AS/EN 9100, ISO 14001 and ISO 45001 (Selected Sites)



NyloGard® 2451SA is a highly durable, tightly woven, adhesive-backed patch constructed from high denier nylon yarns. NyloGard 2451SA provides superior abrasion and cut-through protection for hoses, plastic reservoirs and wire troughs for extreme abrasion applications including cut-through conditions. The unique, multipolymer adhesive exhibits high adhesion to low surface energy plastics such as HDPE, polypropylene and gas filled polypropylene. Parts are available as geometry-specific die-cut patterns for designed-in protection, and in standardized rectangular parts for generic applications or spot-fixes.

NyloGard 2451SA's dense construction provides maximum coverage. These properties extend the service life of the protected component and offer a cost savings associated with decreased component replacements. The optimized adhesive system allows the user to place the protective covering precisely where it is needed and prevents the need to protect the component in its entirety.

NyloGard® 2451SP version also available. This version takes all the value and benefits of NyloGard 2451SA and has additional layer of polymeric film. The addition of film layer provides increased dielectric strength as well as reduces



ability for textile structure to absorb moisture. This additional functionality can be of high value when design in on and around high voltage components.



Performance Data – NyloGard® 2451SA

Property	Test Method	Result
Temperature Rating	Adhesion to Steel Plate (ref. ISO 188)	Pass +80°C (+176°F)
Adherance at Low Temperature	ISO 8510-2	Pass -40°C (-40°F)
Fluid Resistance	SAE J2192	Pass
	ASTM D3032	
Dynamic Cut-Through Resistance	Parallel to fill direction	2050 N avg
	Parallel to warp direction	2100 N avg
Peel Strength	ISO 8510-2	> 525 N/m

All numeric performance data shows average or typical values. Please consult your sales representative for product drawings, test reports and OEM approvals.

Construction and Typical Product Characteristics

Warp Yarn: Nylon 6 (PA6) multifilament	
Fill Yarn: Nylon 6 (PA6) multifilament	
Adhesive System: LSE acrylic adhesive	
Optional Polymeric Film: Polyester	

Availability

NyloGard® 2451SA is a customizable product and is available in various designs to meet specific application requirements.

Standard color is black. Additional colors are available.

Please consult your local sales representative for regional packaging details and standards.



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