

# NPVF Tedlar™

## Color coding tape

### Technical Datasheet

TTDS-004 Revision 3

October 2024

NPVF is a non-printable polyvinyl fluoride self-extinguishing film for use as a wire bundle or cable wrap-around marker, particularly for color coding and bundling/fixing applications in harness production.

Ideal in a variety of harsh physical and chemical environments, especially aerospace and military applications, NPVF is supplied in a continuous tape with a permanent acrylic pressure sensitive adhesive.



# NPVF Tedlar™

## Features

- Non-printable
- Self extinguishing
- Color coding
- Range of colors available
- For use as a wire bundle or cable wrap-around marker
- Good adhesive strength and resistance to ageing
- Resistant to a variety of solvents

## Applications

- Aerospace and Defense
- Industrial
- Electrical
- Electronics

## Shelf life

- Three years when following good commercial storage practice detailed below.

## Storage

- Product should be stored in the original packaging, with any plastic covers which were included during shipping.
- Store out of direct sunlight in a clean, dry, dust free, environment.
- Product should be stored at approximately 21°C (70°F) and 50% R.H.

## Specifications

- ASTM D1000
- MIL-M-87958
- BMS 13-47
- GAT100BA
- P5269
- GM802AD

## Temperature rating

- Operation Temperature Range: -40°C to 135°C (-40°F to 275°F)
- Minimum application temperature: 10°C (50°F)

## Design for Environment

- Does not contain any RoHS (EU 2015/868) substance
- Does not contain any California Prop 65 substances
- No restricted substances as listed in the Toxic Substances Control Act
- Further information and a downloadable declaration covering RoHS and REACH compliance can be found at the TE Product Compliance Support Centre:

<http://www.te.com/usa-en/utilities/product-compliance.html>

Where possible, TE have tested product as a finished item, including the print. Operational tests are followed by an assessment of mark adherence to validate fit form and function.



# NPVF Tedlar™

## Typical Label Thickness

- Label (including adhesive): 0.086 mm (0,0034 inch)
- Liner: 0.125 mm (0.0049 inch)

## Technical Performance

	Requirements	Results
<b>Adhesion</b>		
<b>Test surface:</b>		
• Stainless steel	ASTM D1000 (180°)	17.52 (63.94)
• Backing		15.23 (55.60)
<b>Breaking strength and Elongation</b>		
• ASTM D1000	> 20 lbs/inch	20.82 lbs/inch, Pass
	Minimum 75%	162.20 %, Pass
<b>Dielectric breakdown</b>		
• ASTM D149	Greater than 2500 Volts RMS	4020 V, Pass
<b>Thermal performance MIL-M-87958</b>		
• Low temperature exposure	No cracking, no loosening, no splitting. No separation of flag or unrolling	Pass
• High temperature exposure		Pass
<b>Flammability</b>		
• ASTM D1000	Label must be self extinguishing	Pass
<b>Smoke</b>		
• BSS7238	Less than a specific optical density of 50 after 4 min.	Pass
<b>Toxicity</b>		
• BSS7239	Less than limits listed in table VI BMS 13-47 rev. L	Pass
<b>Fungus</b>		
• ASTM G21-15 (2021)	No growth of fungus	Pass
<b>Corrosion</b>		
• BMS13-47 rev. L	Copper not corroded by contact with the label stock. Electrical resistance of the copper wire shall not increase by more than 2%	-0.27%, Pass

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## Technical Performance

	Requirements	Results
<b>Fluid Exposure MIL-M-87958</b>		
• Methyl Alcohol at 23°C		Pass
• 5% Saline solution at 23°C	Adhesion to steel and Adhesion to backing >15oz/in	Pass
• JP5		Pass <sup>(1)</sup>
• JP8	No detrimental of the label on wrap and flag application	Pass <sup>(1)</sup>
• MIL-PRF-7808 Lubricating Oil at 23°C		Pass
• MIL-PRF-23699 Laundry Oil at 23°C		Pass
• MIL-D-43362 Laundry Detergent at 23°C		Pass
• MIL-H-5606 Hydraulic Oil at 23°C		Pass

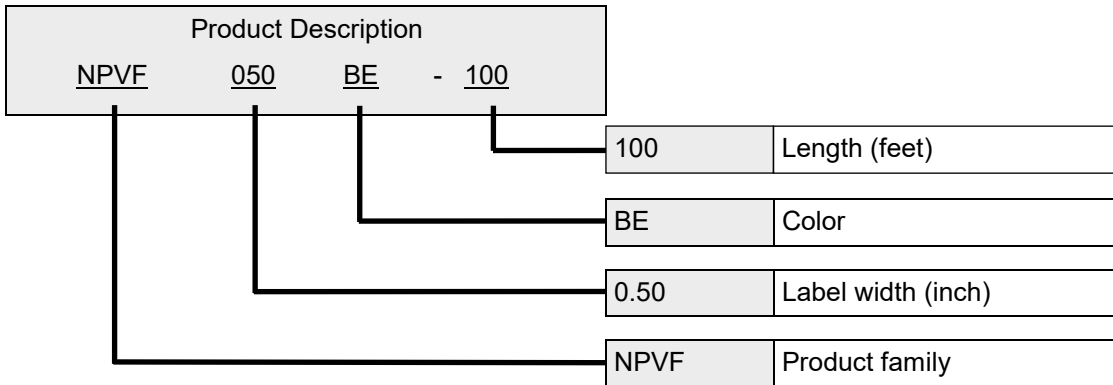
<sup>(1)</sup>Slight unwrapping/unflagging of the label after 5 immersions

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## Ordering Information



Product description	Product order code	Label width inch (mm)	Label length ft (m)	Color
NPVF050BE-100	707830-000	0.500 (12.7mm)	100 (30.48)	Blue
NPVF050BK-100	516902-000	0.500 (12.7mm)	100 (30.48)	Black
NPVF050BN-100	344552-000	0.500 (12.7mm)	100 (30.48)	Brown
NPVF050GD-100	714912-000	0.500 (12.7mm)	100 (30.48)	Gold
NPVF050GN-100	174018-000	0.500 (12.7mm)	100 (30.48)	Green
NPVF050OE-100	656952-000	0.500 (12.7mm)	100 (30.48)	Orange
NPVF050PK-100	CB5637-000	0.500 (12.7mm)	100 (30.48)	Pink
NPVF050RD-100	607406-000	0.500 (12.7mm)	100 (30.48)	Red
NPVF050VT-100	044782-000	0.500 (12.7mm)	100 (30.48)	Violet
NPVF050WE-100	667610-000	0.500 (12.7mm)	100 (30.48)	White
NPVF050YW-100	583910-000	0.500 (12.7mm)	100 (30.48)	Yellow



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