DYMO Industrial Heat Shrinkable Tubing

Description

Flame retardant (3:1 shrink ratio) polyolefin sleeves used for wire identification. The identification marks are permanent immediately after printing and remain legible even when exposed to solvents, fuels and oils. The sleeves are low profile and lightweight. They may be used to provide strain relief and insulation in addition to identification.

DYMO Part Numbers

18051	18053	18055	18057
18052	18054	18056	18058

Available Colors & Sizes

Print Color	**Tape Color**	**Available Widths (in, mm)**
Black	White	¼, 6mm; ⅜, 9mm; ½, 12mm; ¾, 19mm
Black	Yellow	¼, 6mm; ⅜, 9mm; ½, 12mm; ¾, 19mm

Certifications and & Standards Adherence

- UL Recognized as a component to ***UL224*** (UL File Number E348356)
  All UL information can be found at UL.com under certifications

- Meets the performance requirements of SAE-DTL-23053/5 classes 1 & 3
- Printed tubing meets mark permanence requirements of MIL-M-81531 and MIL-STD-202G before and after shrinking

- To the best of our company's knowledge we declare that our products meet the most recent standards of the European Directives considering ***REACH*** and ***ROHS***. None of the substances identified as "substance of concern" has been and will be contained in the product(s), listed on this Technical Data Sheet, to a higher level than mentioned in the European Directives considering REACH and ROHS.

Temperature and Voltage Ratings (tested per *UL224*)

- *Max Voltage (V):* 600
- *Max Operating temperature:* 125°C (257°F)

Physical Properties

- *Total Thickness:* 0.5mm (maximum)

- *Shrink Ratio:* 3:1

Property	Result/Value	Test Method
Tensile strength	10.3 MPa (1500 psi) minimum	SAE-DTL-23053, section 4.6.13
Ultimate elongation	200% minimum	SAE-DTL-23053, section 4.6.13
Heat aging 168 hours at 75°C	minimum 100% ultimate elongation	SAE-DTL-23053, section 4.6.9
Heat shock 4 hours at 250°C	no cracking, dripping or flowing	SAE-DTL-23053, section 4.6.8

Electrical Properties

- *Dielectric strength:* 19.7 kV/mm (500V/mil) minimum tested per ASTM D 2671

Chemical Properties

Property	Result/Value	Test Method
Flammability	No flaming or glowing after 1 minute	ASTM D 2671, procedure B
	No burning of cotton; no dripping	ASTM D 2671, procedure C
Corrosive effect 16 hours at 175°C	Non-corrosive (copper contact)	SAE-DTL-23053, section 4.6.10.1
	No pitting or blackening (copper mirror)	SAE-DTL-23053, section 4.6.10.2

Chemical Resistance (Printed with the Rhino 6000)

Chemical	10 mins immersion, 30 mins recovery, 5 cycles without swab rub	30 mins immersion, 30 mins recovery, 5 cycles with swab rub	Test Method
IPA	No visible defects on the printing	No visible defects on the printing	Mil-STD 202, method 215
MIL 5606 oil	No visible defects on the printing; Discoloration on the background	Slight Fading; Discoloration on the background	
MIL 7808 oil	No visible defects on the printing	No visible defects on the printing	
Skydrol* oil	No visible defects on the printing.	Slight smudging	
Demi water	No visible defects on the printing	No visible defects on the printing	
Kerosene	No visible defects on the printing.	Moderate smudging	

Salt Water: 5% solution	No visible defects on the printing	No visible defects on the printing	

Chemical	# of rubs after 3 minutes at 200°C	Result	Test Method
IPA	20x	No visible defects on the printing	Mil-M-81531
MIL 5606 oil	20x	No visible defects on the printing	
MIL 7808 oil	20x	No visible defects on the printing	
Skydrol* oil	20x	No visible defects on the printing	
Demi water	20x	No visible defects on the printing	
Kerosene	20x	No visible defects on the printing	
Salt Water: 5% solution	20x	No visible defects on the printing	

UV Light Resistance

UV light stability of:	Time	Result	Test Method
Tube	30 days	**White Tube:** Moderate discoloration of the tube (yellowing) **Yellow Tube:** Severe discoloration of the tube (yellow color disappears)	Constant UV light exposure in Suntester
Print	30 days	No visible effect	

Humidity Resistance

- 30 days at 45°C (113°F), 85% Relative Humidity with no visible effect on text or background

Shelf life of cassette

- Two years stored at 21°C (69.8°F) and 50% Relative Humidity

Notice

- This product is not developed to be used on humans, animals and/or in direct food contact.

*Skydrol is a registered trademark from Solutia

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