**Technical datasheet** 

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# 3M<sup>™</sup> Temflex<sup>™</sup> 155

Vinyl Electrical Tape

## 1. Product description

3M<sup>™</sup> Temflex<sup>™</sup> 155 Electrical Tape is an economical general-purpose vinyl insulating tape. It has good resistance to moisture and varying weather conditions. It is a polyvinyl chloride (PVC) tape that is flame-retardant. 3M<sup>™</sup> Temflex<sup>™</sup> 155 Tape provides good mechanical protection with minimum bulk and is classified as Type 1 according to IEC 60454-3-1-1/F-PVCP/60.

- 100% solvent-free manufacturing process with lower emissions
- More sustainable, high-quality GU vinyl electrical tapes with no VOCs (Volatile Organic Compounds)\*

\*not applicable to colour yellow-green

## 2. Applications

- Suitable for ambient indoor uses
- For residential, commercial and manufacturing (OEM) environments
- General wire harness tape
- Bundling wires and cables
- Wire pulling and fishing
- Basic DIY and hardware applications
- Note: NOT for UL applications

# 3. Typical properties

Physical properties	Typical value
Temperature Rating <sup>1</sup> CSA 22.2 Temperature Rating <sup>2</sup> IEC60454-3-1	0°C up to 80°C
Temperature Type 1 (IEC 60454-3-1-1/F-PVC P60)	0°C up to 60°C
Colour	Black, white, yellow, orange, red, green, blue, purple, grey, brown, yellow-green
Thickness (nominal)	0.13 mm
Adhesion to Steel <sup>2</sup> (miminal)	>1.8 N/10 mm
Adhesion to Backing <sup>2</sup> (miminal)	>1.8 N/10 mm
Breaking Strength <sup>2</sup> (miminal)	>20 N/10 mm
Ultimate Elongation <sup>2</sup> (nominal)	150%
<b>Flammability</b> ³ UL 510	Pass

Electrical properties	Typical value
<b>Dielectric Breakdown</b> <sup>2</sup> Standard Condition (minimal) High Humidity	>40kV/mm >90% of Standard
Insulation Resistance <sup>2</sup> (minimal)	>1×10 <sup>11</sup> Ω

Properties measured at room temperature 23°C unless otherwise stated. <sup>1</sup>CSA 22.2 Standard <sup>2</sup>IEC60454-3-1 Standard <sup>3</sup>UL510 Standard

## 4. User information

### 4.1 Specifications

Temflex<sup>™</sup> 155 Vinyl Electrical Tape is based on polyvinyl chloride (PVC) and/or its copolymers and has a rubber-based, pressure-sensitive adhesive. The tape is 0,13 mm thick, tested according UL-Standard 510 and marked as 'Flame Retardant'. The tape is applicable at temperatures ranging from 0°C through 38°C without loss of physical properties. It's classified for use in both indoor and outdoor environments and is compatible with synthetic cable insulations, jackets and splicing compounds.

#### 4.2 Installation techniques

Temflex<sup>™</sup> 155 Vinyl Electrical Tape should be applied in half-lapped layers with sufficient tension to produce a uniform wind (for most applications this tension will reduce the tape's width to approximately 60% of its original width). On pigtail splices, the tape must be wrapped beyond the end of the wires and then folded back, leaving a protective cushion to resist cut-through. Wrap tape up-hill, taping from a smaller diameter surface to a larger diameter surface. Apply the tape with no tension on the last wrap to prevent flagging.

#### 4.3 Shelf life and storage

3M<sup>™</sup> Temflex<sup>™</sup> 155 Electrical Tape has a 5-year shelf life from date of manufacture when stored in a humidity controlled area (10°C to 27°C and <75% relative humidity).

## 4.4 Agency approvals and self certifications

- CSA tested; CSA-C22.2 No.197 "PVC Insulating Tape", self-certified
- IEC60454-3-1 tested; Temperature Type 1: IEC 60454-3-1-1/F-PVC P60, self-certified
- UL510 tested, self-certified
- For RoHS information, please visit www.3M.com/RoHS

### 4.5 Availability

Please contact your local distributor.

## 5. Additional information

To request additional product information, see address below.

#### Important notice

All statements, technical information and recommendations contained in this document are based upon tests or experience that 3M believes are reliable. However, many factors beyond 3M's control can affect the use and performance of a 3M product in a particular application, including the conditions under which the product is used and the time and environmental conditions in which the product is expected to perform. Since these factors are uniquely within the user's knowledge and control, it is essential that the user evaluates the 3M product to determine whether it is fit for a particular purpose and suitable for the user's method or application.

Values presented have been determined by standard test methods and are average values not meant to be used for specification purposes.

All questions of warranty and liability relating to 3M products are governed by the terms of the respective sale subject, where applicable, to the prevailing law.

#### **3M Electrical Markets Division**

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