



**Technical Data Sheet** 

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# Supersedes: June, 2024

3M<sup>™</sup> High Temperature Aluminum Foil/Glass Cloth Tape 363





Regulatory Info/SDS

Product Details

# **Product Description**

3M<sup>™</sup> High Temperature Aluminum Foil/Glass Cloth Tape 363 can be used as a high temperature, heat reflective, protective wrap for certain cables and other components in aerospace and industrial applications. Also comes in an easy-release film liner (3M<sup>™</sup> High Temperature Aluminum Foil/Glass Cloth Tape 363L).

## **Product Features**

Can easily be die-cut into special sizes or shapes.
Light, flexible construction - easily applied to a variety of irregular shapes.
Performs continuously from -65°F (-54°C) to 600°F (316°C).
Meets the requirements of FAR 25.853(a).
Meets the surface flammability and smoke density requirements for all categories and material functions as specified by NEM 120. Der ASTM F162 and ASTM F662. by NFPA 130 - Per ASTM E162 and ASTM E662.

- Exhibits low, average, and peak rates of heat release per ASTM E1354.
  Generates low levels of toxic gas in both flaming and non-flaming modes per BSS-7239.
- Best results obtained when applied to a clean dry surface above 32°F (0°C), but can be applied at lower temperatures.

## **Technical Information Note**

The following technical information and data should be considered representative or typical only and should not be used for specification purposes.

# **Typical Physical Properties**

Attribute Name	Test Method	Value	
Color		Silver	
Adhesive Type		Silicone (transparent)	
Approximate Weight		0.0057 g/m/24 mm (0.0114 lb/yd/in)	
Backing		Aluminum foil laminated to glass cloth	
Backing Thickness	ASTM D3652	0.06 mm (2.4 mil) <sup>1</sup>	
Backing Thickness	ASTM D3652	0.025 mm (1 mil) <sup>2</sup>	
Total Tape Thickness	ASTM D3652	0.19 mm (7.3 mil)	

<sup>1</sup> Glass Cloth

<sup>2</sup> Foil

# **Typical Performance Characteristics**

Attribute Name	Test Method	Temperature	Value
180° Peel Adhesion	ASTM D3330	23 °C (73 °F)	5.7 N/cm (52 oz/in) <sup>1</sup>
Elongation at Break	ASTM D3759		7 %
Tensile Strength	ASTM D3759		236.4 N/cm (135 lb/in)
Long Term Temperature			316 °C (600 °F) <sup>2</sup>
Resistance			310 C (000 F) -
Minimum Long Term			-54 °C (-65 °F) <sup>2</sup>
Temperature Resistance			-54 C (-05 F) <sup>2</sup>

<sup>1</sup> 304 mm/min (12 in/min)

<sup>2</sup> Long Term (day, weeks)

### Handling/Application Information

#### **Application Examples**

• A heat reflective wrap, over insulation cables, instruments, or other high temperature sensitive materials.

#### Industry Specifications

FAR 25.853(a) NFPA 130 test report for details (ASTM E1354) NFPA 130 test report for details (ASTM E162) NFPA 130 test report for details (ASTM E662) NFPA 130 test report for details (BSS 7239)

#### **Storage and Shelf Life**

Store under normal conditions of 16° to 27°C (60° to 80°F) and 40 to 60% relative humidity in the original packaging, out of direct sunlight. For best performance, use this product within 36 months from date of manufacture.

#### **Available Sizes**

Attribute Name	Value
Standard Roll Length	33 m (36 yd)

### Automotive Disclaimer

#### Select Automotive Applications:

This product is an industrial product and has not been designed or tested for use in certain automotive applications, such as automotive electric powertrain battery or high voltage applications, which may require the product to be manufactured in a IATF certified facility, meet a Ppk of 1.33 for all properties, undergo an automotive production part approval process (PPAP), or fully adhere to automotive design or quality system requirements (e.g., IATF 16949 or VDA 6.3). Customer assumes all responsibility and risk if customer chooses to use this product in these applications.

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### **ISO Statement**

This product was manufactured under a 3M quality system registered to ISO 9001 standards.

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