



Technical Data Sheet

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

Product Description

3M™ 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™ 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 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
Backing		Aluminum foil laminated to glass cloth
Backing Thickness	ASTM D3652	0.06 mm ¹
Backing Thickness	ASTM D3652	0.025 mm ²
Total Tape Thickness	ASTM D3652	0.19 mm

¹ Glass Cloth

² Foil

Typical Performance Characteristics

Attribute Name	Test Method	Temperature	Value
180° Peel Adhesion	ASTM D3330	22 °C	5.7 N/cm ¹
Elongation at Break	ASTM D3759		7 %
Tensile Strength	ASTM D3759		236.4 N/cm
Long Term Temperature Resistance			316 °C ²
Minimum Long Term Temperature Resistance			-54 °C ²

¹ 12 in/min (300 mm/min)

² 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

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.

Information

Precautionary Information: Refer to product label and Material Safety Data Sheet for health and safety information before using the product. For information, please contact your local 3M Office. You can click or scan QR code to see contact detail or visit www.3M.com Important Information: 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 evaluate the 3M product to determine whether it is fit for a particular purpose and suitable for the user's method or application. All questions of liability relating to this product are governed by the terms of the sale subject, where applicable, to the prevailing law. Values presented have been determined by standard test methods and are average values not to be used for specification purposes. Our recommendations on the use of our products are based on tests believed to be reliable but we would ask that you conduct your own tests to determine their suitability for your applications. This is because 3M cannot accept any responsibility or liability direct or consequential for loss or damage caused as a result of our recommendations.

ISO Statement

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

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