



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

Property	Values	Additional Information
Backing	Aluminum foil laminated to glass cloth	
Adhesive Type	Silicone (transparent)	
Color	Silver	
Backing Thickness	0.025 mm	View
Test Method: ASTM D3652		
Notes: Foil		
Backing Thickness	0.06 mm	View
Test Method: ASTM D3652		
Notes: Glass Cloth		

Total Tape Thickness (mil)	7.3 mil	View
Test Method: ASTM D3652		
Total Tape Thickness (mm)	0.19 mm	View
Test Method: ASTM D3652		
Backing Thickness	1 mil	View
Test Method: ASTM D3652		
Notes: Foil		
Backing Thickness	2.4 mil	View
Test Method: ASTM D3652		
Notes: Glass Cloth		
Approximate Weight	0.0057 g/m/24 mm	
Approximate Weight	0.0114 lb/yd/in	

Typical Performance Characteristics

Property	Values	Additional Information
Tensile Strength	236.4 N/cm	View
Test Method: ASTM D3759		
180° Peel Adhesion	5.7 N/cm	View
Test Method: ASTM D3330		
Notes: 12 in/min (300 mm/min)		
180° Peel Adhesion	52 oz/in	View
Test Method: ASTM D3330		
Notes: 12 in/min (300 mm/min)		
Tensile Strength (lb/in)	135 lb/in	View
Test Method: ASTM D3759		
Elongation at Break (%)	7 %	View

Test Method: ASTM D3759

Long Term Temperature Resistance	316 °C
Minimum Long Term Temperature Resistance	-54 °C
Long Term Temperature Resistance	600 °F
Minimum Long Term Temperature Resistance	-65 °F

Available Sizes

Property	Values	Additional Information
Standard Roll Length	33 m	
Standard Roll Length	36 yd	

Storage and Shelf Life

Store under normal conditions of 60° to 80°F (16° to 27°C) and 40 to 60% R.H. in the original carton.

To obtain best performance, use this product within 36 months from date of manufacture.

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 \(BSS 7239\)](#)

Automotive Disclaimer

Automotive Applications: This product is an industrial product and has not been designed or tested for use in certain automotive applications, including, but not limited to, automotive electric powertrain battery or high voltage applications. This product does not fully adhere to typical automotive design or quality system requirements, such as IATF 16949 or VDA 6.3. This product may not be manufactured in an IATF certified facility and may not meet a Ppk of 1.33 for all properties. The product may not undergo an automotive production part approval process (PPAP). Customer is solely responsible for evaluating the product and determining whether it is appropriate and suitable for customer's automotive application and for conducting incoming inspections before use of the product. Failure to do so may result in injury, death, and/or harm to property. No written or verbal statement, report, data or recommendation by 3M related to automotive use of the product shall have any force or effect unless in an agreement signed by the Technical Director of 3M's Automotive Division. Customer assumes all responsibility and risk if customer chooses to use this product in an automotive electric powertrain battery or high voltage application, and 3M will not be liable for any loss or damage arising from or related to the 3M product or customer's use of the product, whether direct, indirect, special, incidental, or consequential (including, but not limited to, lost profits or business opportunity or recall costs), regardless of the legal or equitable theory asserted, including, but not limited to, warranty, contract, negligence, or strict liability. In no event shall 3M be liable for any damages in excess of the purchase price paid for the product.

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Bottom Matter

3M
Industrial Adhesives and Tapes Division
3M Center, Building 225-3S-06
St. Paul, MN 55144-1000
800-362-3550

Trademarks

3M is a trademark of 3M Company.

Handling/Application Information

Application Examples

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

References

Property	Values
3m.com Product Page	https://www.3m.com/3M/en_US/p/d/b40074779/
Safety Data Sheet SDS	https://www.3m.com/3M/en_US/company-us/SDS-search/results/?gsaAction=msdsSRA&msdsLocale=en_US&co=ptn&q=363

ISO Statement

This Industrial Adhesives and Tapes Division product was manufactured under a 3M quality system registered to ISO 9001 standards.

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