



Technical Data Sheet

3M[™] Glass Cloth Tape 398FR

English-US Last Revision Date: June, 2024

Supersedes: May, 2022



Regulatory Info/SDS

Product Details

Product Description

3M[™] Glass Cloth Tape 398FR has an acrylic adhesive for many applications requiring high adhesion, an abrasion-resistant backing and flame retardant properties. This product is typically used for sealing aircraft cargo bay panels to provide a permanent seal.

Product Features

• Meets flame retardancy requirements of FAR 25.853 (a) Appendix F Part I (a) (1) (ii) and FAR 25.855(d) Appendix F Part I (a) (2) (ii). • 3M[™] Glass Cloth Tape 398FR meets the requirements of and can be qualified to Boeing material specification BMS

5-146 Type I, Class I, Grade A.

• EU compliant per directive 2003/11/EC of the European Parliament and the Council of February 6, 2003, amending Council Directive 76/769/EEC which restricts the use of penta-BDE and octa-BDE flame retardants. • Acrylic adhesive has excellent long aging properties ideal for many permanent applications.

• White color makes finished job look appealing.

• Formulation does not contain antimony.

• High conformability.

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		White	
Adhesive Type		Acrylic	
Weight	ASTM D1000	231 g/m ² (6.8 oz/yd ²)	
Backing		Glass Cloth	
Backing Thickness	ASTM D3652	0.13 mm (5 mil)	
Total Tape Thickness	ASTM D3652	0.18 mm (7 mil)	
Liner		HD Polyethylene Film	
Primary Liner Color		Blue	

Typical Performance Characteristics

Attribute Name	Test Method	Temperature	Value
180° Peel Adhesion	ASTM D3330	22 °C (72 °F)	4.2 N/cm (38 oz/in) ¹
Elongation at Break	ASTM D3759		7 %
Tensile Strength	ASTM D3759		227.7 N/cm (130 lb/in)
Long Term Temperature			121 °C (250 °F) 2
Resistance			121 C (250 F) -
Minimum Long Term			-29 °C (-20 °F) 2
Temperature Resistance			-29 C (-20 T)

1 12 in/min (300 mm/min)

² Long Term (day, weeks)

Handling/Application Information

Application Examples

- Sealing thermal and acoustic insulation panels where high adhesion and flame retardancy are needed.
- Aircraft window sealing, duct sealing and seat repair.
- Protection of wire harnesses, electrical cables or hoses from temperature extremes and abrasion.
- Marine applications.
- Many general industrial uses.

Industry Specifications

FAR 25.853 (a) Appendix F Part I (a) (1) (ii) FAR 25.855(d) Appendix F Part I (a) (2) (ii)

Meets the requirements of and can be qualified to Boeing material specification BMS 5-146 Type I, Class I, Grade A EU compliant per directive 2003/11/EC of the European Parliament and the Council of February 6, 2003, amending Council Directive 76/769/EEC which restricts the use of penta-BDE and octa-BDE flame retardants

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 24 months from date of manufacture.

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

Technical Information: The technical information, guidance, and other statements contained in this document or otherwise provided by 3M are based upon records, tests, or experience that 3M believes to be reliable, but the accuracy, completeness, and representative nature of such information is not guaranteed. Such information is intended for people with knowledge and technical skills sufficient to assess and apply their own informed judgment to the information. No license under any 3M or third party intellectual property rights is granted or implied with this information.

Product Selection and Use: Many factors beyond 3M's control and uniquely within user's knowledge and control can affect the use and performance of a 3M product in a particular application. As a result, customer is solely responsible for evaluating the product and determining whether it is appropriate and suitable for customer's application, including conducting a workplace hazard assessment and reviewing all applicable regulations and standards (e.g., OSHA, ANSI, etc.). Failure to properly evaluate, select, and use a 3M product and appropriate safety products, or to meet all applicable safety regulations, may result in injury, sickness, death, and/or harm to property.

Warranty, Limited Remedy, and Disclaimer: Unless a different warranty is specifically stated on the applicable 3M product packaging or product literature (in which case such warranty governs), 3M warrants that each 3M product meets the applicable 3M product specification at the time 3M ships the product. 3M MAKES NO OTHER WARRANTIES OR CONDITIONS, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OR CONDITION OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR ARISING OUT OF A COURSE OF DEALING, CUSTOM, OR USAGE OF TRADE. If a 3M product does not conform to this warranty, then the sole and exclusive remedy is, at 3M's option, replacement of the 3M product or refund of the purchase price.

Limitation of Liability: Except for the limited remedy stated above, and except to the extent prohibited by law, 3M will not be liable for any loss or damage arising from or related to the 3M product, whether direct, indirect, special, incidental, or consequential (including, but not limited to, lost profits or business opportunity), regardless of the legal or equitable theory asserted, including, but not limited to, warranty, contract, negligence, or strict liability.

Disclaimer: 3M industrial and occupational products are intended, labeled, and packaged for sale to trained industrial and occupational customers for workplace use. Unless specifically stated otherwise on the applicable product packaging or literature, these products are not intended, labeled, or packaged for sale to or use by consumers (e.g., for home, personal, primary or secondary school, recreational/sporting, or other uses not described in the applicable product packaging or literature), and must be selected and used in compliance with applicable health and safety regulations and standards (e.g., U.S. OSHA, ANSI), as well as all product literature. Misuse of 3M industrial and occupational products may result in injury, sickness, or death. For help with product selection and use, consult your on-site safety professional, industrial hygienist, or other subject matter expert. For additional product information, with the subject matter expert. For additional product information, which was a more subject matter expert. visit www.3M.com

ISO Statement

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

3M[™] Industrial Adhesives and Tapes Division 3M Center, St. Paul, MN 55144-1000 3M.com/iatd

© 3M 2024 (6/24)