



# Flame Retardant Glass Cloth Tape

## 399FR

Technical Data

January, 2013

### Product Description

3M™ Flame Retardant Glass Cloth Tape 399FR 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 duct work and insulation panels to provide a permanent seal.

### Product Construction

Backing	Adhesive	Color	Liner
Glass Cloth	Acrylic	White	Blue HD Polyethylene Film

### Typical Physical Properties

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

		ASTM Test Method
Adhesion to Steel:	52 oz./in. width (57 N/100 mm)	D-3330
Tensile Strength:	130 lbs./in. width (2,276 N/100 mm)	D-3759
Backing Thickness:	5.0 mils (0.13 mm)	D-3652
Total Thickness:	9.5 mils (0.24 mm)	D-3652
Elongation at Break:	7%	D-3759
Weight:	9.0 ozs./sq. yd. (305 g/m <sup>2</sup> )	D-1000
Operational Temperature Range:	-20°F to 200°F (-29°C to 93°C)	

### Features

- Can be certified to meet the flame retardancy requirements of F.A.R. Part 25.853(a), F.A.R. Part 25.855(d) and MIL A-3316C 3 13.1 and 3 13.2.
- Complies with MIL-STD-2041D(SH), Notice 2 for leachable halides and sulfur.
- **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.

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- Application Ideas**
- Sealing thermal and acoustic insulation panels where high adhesion and flame retardancy are needed.
  - Protection of wire harnesses, electrical cables or hoses from temperature extremes and abrasion.
  - Many aerospace, marine, general industrial uses.
  - Apply above 50°F (10°C) for best adhesion.

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**Storage** Store in a clean dry place at 60-80°F (15-27°C).

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**Shelf Life** When stored under proper conditions, product retains its performance and properties for 24 months from date of manufacture.

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**Technical Information** The technical information, recommendations and other statements contained in this document are based upon tests or experience that 3M believes are reliable, but the accuracy or completeness of such information is not guaranteed.

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**ISO 9001**

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

# 3M

## Industrial Adhesives and Tapes Division

3M Center, Building 225-3S-06  
St. Paul, MN 55144-1000  
800-362-3550 • 877-369-2923 (Fax)  
www.3M.com/industrial



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