

Corrosion Prevention Sealing Tape 9143FR

Technical Data Sheet

Product Description

3M™ Corrosion Prevention Sealing Tape 9143FR is a 43 mil thick tape designed to provide a corrosion preventative sealing layer between aircraft floor beams and floorboards. When applied to aluminum floor beams and other floor support structures, the tape helps to protect the metallic support structure from corrosion caused by repeated exposure to various fluids, particularly around doors, galleys, lavatories, and in the cargo compartment. 9143FR is comprised of a polyester backing and a flame retardant acrylic adhesive that cuts easily, is repositionable, and removes cleanly after service. The product is available in a variety of widths in roll form.

9143FR is FAA PMA approved. For 3M recommended application and removal procedures, please see *3M™ Corrosion Prevention Sealing Tape 9143FR Installation, Maintenance, and Removal Instructions* and *Instructions for Continued Airworthiness* available from <https://www.3m.com/AerospaceFAAPMA>.

Dimensions

Approximate Thickness	0.043 in (1.09 mm)
Standard Roll Length	4 yd (3.7 m)
Available Roll Widths	Maximum 24 in (61 cm)
Approximate Weight	2.43 lb/sqyd (1318 g/sqm)

Typical Physical Properties and Performance Characteristics

Notes: 1) The following technical information and data should be considered representative or typical only and should not be used for specification purposes. 2) ASTM = American Society for Testing and Materials. 3) Metric values are listed in parenthesis

Property	Test Method	Units	Results	
Tensile Strength @ Break	ASTM D882	lb/in (N/100mm)	36 (630)	
Elongation @ Break		%	43	
90° Peel Adhesion @ 73° F (23° C) to:	ASTM D3330 Method F*, with the following conditioning:	oz/in (N/100mm)		
AkzoNobel 10P4-2NF Epoxy Primer	24 hr dwell at 73 °F / 50% RH			27 (30)
	1 week dwell at 180 °F**			171 (187)
	1 week dwell at 140 °F / 95% RH**			132 (145)
AkzoNobel 446-22-1000 High Solids Epoxy Enamel	24 hr dwell at 73 °F / 50% RH			17 (19)
	1 week dwell at 180 °F**			83 (91)
	1 week dwell at 140 °F / 95% RH**			25 (27)
Chemetall Ardrex® AV-8 Corrosion Inhibiting Compound (1 hour cure)	24 hr dwell at 73 °F / 50% RH			34 (37)
Chemetall Ardrex® AV-8 Corrosion Inhibiting Compound (24 hour cure)	24 hr dwell at 73 °F / 50% RH			30 (33)
Water Vapor Transmission Rate	ASTM F1249 (100 °F / 100% RH)			g/(m ² -day)
Flame Resistance	12-second vertical burn***	-	Pass	
	12-second vertical burn - Applied on 0.020 inch thick 7075-T6 aluminum***	-	Pass	
	15-second horizontal burn****	-	Pass	

* Peel adhesion conducted at 90° angle and peel rate of 10 in/min

** Samples allowed to dwell for 24 hours at 73 °F / 50% RH prior to conditioning and another 24 hours at 73 °F / 50% RH after conditioning and before testing

*** Tested in accordance with 14 CFR 25.853 (a), Appendix F, Part I (a) (1) (ii), 12-second vertical burn per FAA Policy Statement PS-ANM-25.853-01-R2, Reference 21, Option 1 (in a stand-alone mode, cut tape sample of nominal size: 3" x 12") and FAA Policy Statement PS-ANM-25.853-01-R2, Reference 21, Option 3 (bonded to a worst case substrate). Installation approval is the responsibility of the design approval holder or the aircraft owner/operator.

**** Tested in accordance with 14 CFR 25.853 (a), Appendix F, Part I (a) (1) (iv), 15-second horizontal burn.

Material self-extinguished before reaching the 1.5" timing zone for burn rate calculation. Installation approval is the responsibility of the design approval holder or the aircraft owner/operator.

Environmental Health and Safety

- 3M™ Corrosion Prevention Sealing Tape 9143FR is 100% solids and considered to be an article.

Shipping and Storage

- No special/hazardous labeling or packaging is required.
- Keep tape in a clean area, away from excessive moisture and out of direct sunlight. Store rolls in the shipping carton. Return partially used rolls to the shipping carton.
- Shelf Life: Two (2) years from the date of manufacture or as expressly certified by 3M.

Precautionary Information

In addition to this technical data sheet, please refer to the product label and the applicable Article Information Sheet (AIS) or Safety Data Sheet (SDS) for proper handling and health and safety information before using. The AIS or SDS is available on request or at www.3M.com/msds.

Additional Information

In the U.S. call toll free 1-800-235-2376, or fax 1-800-435-3082 or 651-737-2171. For U.S. Military, call 866-556-5712. If you are outside of the U.S., please contact your nearest 3M representative.

**This product is manufactured under a 3M Quality Management System registered to the AS9100 standard.*

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