

Medical Materials & Technologies

**3M™ Microfluidic Diagnostic Tape
9981 Single Coated Aluminum Tape**



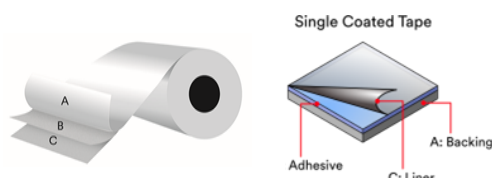
Product Description

3M™ Microfluidic Diagnostic Tape 9981, consists of a 2 mil bright aluminum foil coated on one side with a pressure sensitive silicone adhesive. The tape is supplied on a clear fluoro-silicone coated polyester release liner. The product is designed for use in diagnostic medical devices such as test strips and lab-on-a-chip or other challenging applications such as PCR.

Features and Benefits

- Silicone adhesive
- Adheres to a wide variety of substrates
- Thermally conductive
- Low autofluorescence
- Low evaporation
- Designed for lab-on-a-chip and PCR
- Non-hemolytic
- Low extractables
- Non-toxic to mammalian cells

Composition



A: Backing	2 mil (51 um) Aluminum Foil
B: Adhesive	2 mil (51 um) Silicone adhesive
C: Liner	2 mil (51 um) Clear fluoro-silicone coated polyester release liner

Roll Description

Roll Length	Maximum 300 yd (274 m) ± 2%
Roll Width	Maximum 11.0 in (27.9 cm) ± 0.06 in (1.52 mm)

Note: Core material 6 in (152 mm) plastic core.

Adhesion & Liner Release

Adhesion to glass, 180° Peel	40 oz/in (4.4 N/cm) – minimum
Liner release, 90° Peel	60 gm/in (232 mN/cm) - maximum

Note: release specification at the time of production

Biocompatibility Testing

The adhesive used in product 9980 (with a thinner aluminum backing) has been subjected to the following safety evaluations through an outside laboratory.

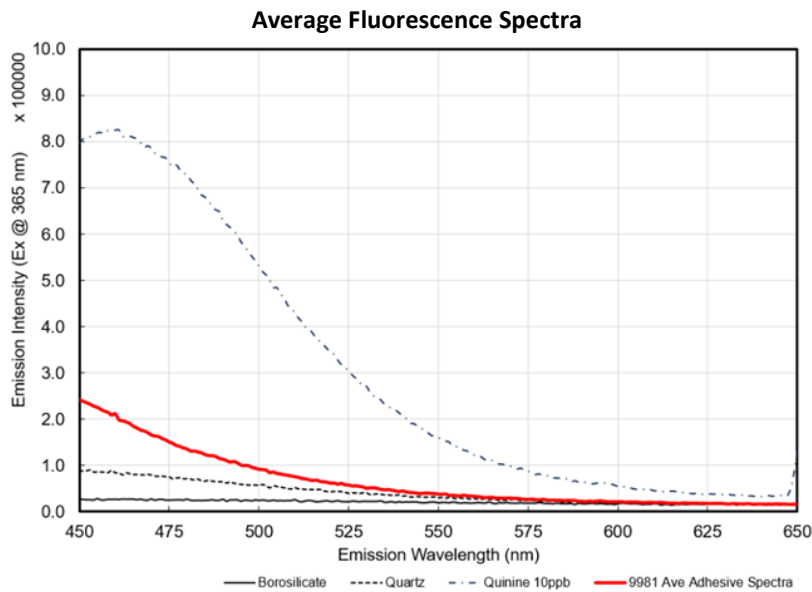
Study Type	Test method	Standard	Result
Cytotoxicity	Agar overlay	ISO 10993-5	Not cytotoxic
Cytotoxicity	MEM Elution	ISO 10993-5	Not cytotoxic
Hemocompatibility	Direct contact	ISO 10993-4	Non-hemolytic
Hemocompatibility	Extracts	ISO 10993-4	Non-hemolytic

Integrated Emission Intensity

Samples were compared to known reference materials, quartz slide, borosilicate slide and 10 ppb quinine. Quinine sulfate was chosen due to its high purity and stability as a fluorescence standard reference material.

Sample	Integrated Emission Intensity/10 ⁶
Quartz Slide	8.0
Borosilicate Cover Slide	4.1
3M 9980 Adhesive	13.4
10 ppb quinine in 0.5 N sulfuric acid	59.6

*Sum of emission intensities over the range ($\lambda_{EX} = 365 \text{ nm}$, $\lambda_{EM} = 450\text{-}650 \text{ nm}$)



Recommended Storage Conditions & Shelf Life

Product as supplied in original packaging will maintain certified properties for a period of two years from date of manufacture when stored at room temperature 68-77 °F (20-25 °C).

Product and Safety Information: User is solely responsible for determining the suitability of 3M samples and products for the intended use including any necessary safety or toxicity assessment. 3M will provide Material Safety Data Sheets or equivalent and summary results of biocompatibility testing upon request. In every case before using any product in full scale production users should conduct their own tests to determine to their own satisfaction whether the product is of acceptable quality and is suitable for their particular purposes under their own operating conditions.

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Ordering Information

To place an order, call our Customer Service at: **800-742-1994 (U.S.)**. For all orders outside the United States, please contact your local country representative or check out **3M.com/MedTechFindaRep** for your region's contact information.

To have a sales representative contact you, to request samples or clinical and safety summaries, please contact us at 3M HELPLINE 800-228-3957 (U.S.) or check out **3M.com/MedTechContactUs** for your region's contact information.

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