

Medical Materials & Technologies

**3M™ Microfluidic Diagnostic Tape,
9969 Adhesive Transfer Tape on Polyester Liners**



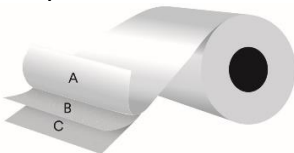
Product Description:

3M™ Microfluidic Diagnostic Tape 9969, consists of a clear pressure sensitive transfer adhesive. The adhesive is supplied between two clear, silicone coated polyester release liners. The product is designed for use in diagnostic medical devices such as test strips and lab-on-a-chip.

Features and Benefits:

- Designed for high through put converting
- Adheres to a variety of substrates
- Transparent
- Low autofluorescence
- Non-hemolytic
- Non-toxic to mammalian cells
- Low extractables
- Designed for cleaner die cutting

Composition:



A: Release Liner	2 mil (0.05 mm) Silicone coated polyester release liner
B: Adhesive	1 mil (0.025 mm) Acylate adhesive
C: Release Liner	2 mil (0.05 mm) Silicone coated polyester release liner

Roll Description:

Roll Length	Maximum 1640 yd (1500 m) ± 2%
Roll Width	Maximum 48 in (122 cm) ± 0.06 in (1.52 mm)
Splices per Roll	Maximum 3 per 500 yd (457 m) Maximum 5 per 1000 yd (914 m) Maximum 7 per 1500 yd (1372 m)

Note: Core material and diameter must be specified in special instructions of order set. Default: 3 in (76 mm) fiber core. Material options: fiber or plastic. Diameter options: 3 in (76 mm) or 6 in (152 mm).

Adhesion & Liner Release:

Adhesion to steel, 180° Peel*	29.3 oz/in (8.2 N/25.4 mm)
Adhesion to polyester, 180° Peel*	38.4 oz/in (10.7 N/25.4 mm)
Adhesion to polycarbonate, 180° Peel*	38.5 oz/in (10.7 N/25.4 mm)
Adhesion to acrylic, 180° Peel*	35.3 oz/in (9.8 N/25.4 mm)
Adhesion to polypropylene, 180° Peel*	7.7 oz/in (2.1 N/25.4 mm)
Liner Release moderate side, 180° Peel	16.9 gm/in (0.17 N/25.4 mm)
Liner Release easy side, 180° Peel	4.2 gm/in (0.04 N/25.4 mm)

Represents typical value. *Adhesion tested after 5-minute dwell time.

Biocompatibility Testing:

Product 9969 has been subjected to the following safety evaluations.

Study Type	Test Method	Standard	GLP	Results
In vitro cytotoxicity	Cell lysis & cytotoxicity	ISO 10993-5: ≤ 2	Yes	Reactivity grade: 0
MEM elution	Cell lysis & cytotoxicity	ISO 10993-5: ≤ 2	Yes	Reactivity grade: 0
Hemolytic Index	Interaction with Blood	ISO 10993-4: $< 2\%$	Yes	Non-Hemolytic (index: 0.0%)
	Test article extract	ISO 10993-4: $< 2\%$	Yes	Non-Hemolytic (index: 0.0%)

Optical Properties:

Transmission: 88.6%	Haze: 11.4%	Clarity: 84.9%
---------------------	-------------	----------------

Represents typical value based on ASTM: D1003.

Spectroscopy

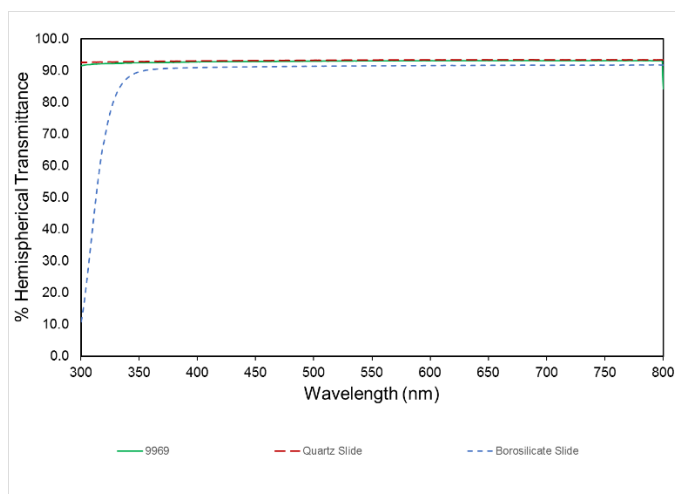
Integrated Emission Intensity

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.

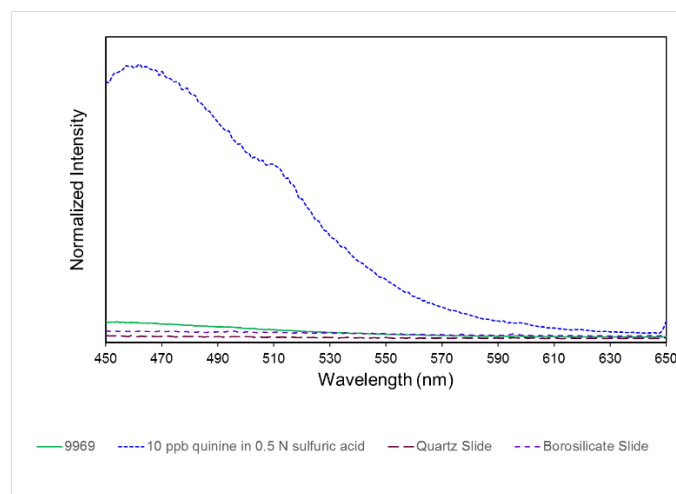
Sample	Integrated Emission Intensity/ 10^6
Quartz Slide	2.9
Borosilicate Cover Slide	5.7
3M 9969	6.6
10 ppb quinine in 0.5 N sulfuric acid	69.3

Represents typical value * ($\lambda_{Ex} = 365 \text{ nm}$, $\lambda_{Em} = 450\text{-}650 \text{ nm}$)

UV Vis Transmittance Spectra



Average Fluorescence Spectra



Recommended Storage Conditions & Shelf Life:

Product as supplied in original packaging will maintain certified properties for a period of one year 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.

Notice: Nothing contained herein shall be construed to imply the nonexistence of any relevant patents or to constitute a permission, inducement or recommendations to practice any invention covered by any patent, without authority from the owners of this patent.

Warranty Information

All statements, technical information and recommendations herein are based on tests 3M believes to be reliable, but the accuracy or completeness thereof is not guaranteed. 3M warrants only that products will meet 3M's specifications at the time of shipment to the customer. 3M does not offer any other warranty and does not warrant the performance, safety or such other characteristics of products in combination with other materials. 3M specifically DOES NOT warrant products for any intended or unintended uses (whether or not foreseeable); for compatibility or suitability with other components or compatibility with any methods of manufacture or conversion. The foregoing warranty is made in lieu of all other warranties, expressed or implied, including the implied warranties of merchantability, fitness for a particular purpose and freedom from non-infringement.

Limitation of Remedies: If products are proven not to meet 3M's specifications, the sole and exclusive remedy available and 3M's only obligation shall be, at 3M's option, to replace such quantity of Products which are proven out of specification or to refund the purchase price paid for Products.

Limitations of Liabilities: The remedies provided herein are exclusive remedies against 3M for any alleged or actual nonconformance to specifications or defect or other failure in products or for 3M's performance of its supply obligations. Under no circumstances is 3M liable for any direct, indirect, incidental, special or consequential damages (including lost profits) in any way related to the product under any theory of law including, but not limited to, negligence and strict liability.

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.

Visit our website: www.3M.com/MedTech for product and services information, news, events, new product highlights or to make a direct inquiry.



Medical Materials & Technologies

3M Center, Building 275-5W-05
St. Paul, MN 55144-1000 USA

Phone 1-800-228-3957
Web 3M.com/MedTech

3M is a trademark of 3M.

Please recycle. Printed in U.S.A.

© 3M 2020. All rights reserved.

Effective June 2020