



# Technical Data Sheet

## 3M™ VHB™ Thin Foam Tape 86430



[Regulatory Info/SDS](#)

### Product Description

Finite Element Analysis (FEA) data is available for this product at: [3m.com/FEA](https://www.3m.com/FEA)

3M™ VHB™ Thin Foam Tape 86430 is a thin foam tape with pressure sensitive adhesive on both sides and is used for bonding a wide range of high and low surface energy materials in the electronics industry. This specially formulated foam provides impact resistance and high bond strength while providing good conformability.

### Product Features

- Thin foam tapes with pressure sensitive adhesive (PSA) on both sides
- Good impact resistance and conformability
- High bond strength

### 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
Adhesive Type		Acrylic
Density	ASTM D3574	960 kg/m <sup>3</sup> (60 lb/ft <sup>3</sup> ) <sup>1</sup>
Total Tape Thickness	ASTM D3652	0.3 mm (12 mil)
Color		Black
Liner		Polyester
Liner Thickness		0.08 mm (3 mil)
Primary Liner Color		Clear
Thickness Tolerance		± 15 %

<sup>1</sup> Foam with adhesive

### Typical Performance Characteristics

#### 90° Peel Adhesion

Temperature: 22 °C (72 °F)

Backing: 2 mil PET

Test Method: ASTM D3330

Dwell Time	Substrate	Value
15 min	Stainless Steel	10 N/cm (91 oz/in) <sup>1</sup>
72 h	Polycarbonate (PC)	12.5 N/cm (114 oz/in) <sup>1</sup>
72 h	Polypropylene (PP)	9 N/cm (82 oz/in) <sup>1</sup>
72 h	Stainless Steel	14 N/cm (128 oz/in) <sup>1</sup>
72 h	Glass	14 N/cm (128 oz/in) <sup>1</sup>
72 h	ABS	10 N/cm (93 oz/in) <sup>1</sup>

<sup>1</sup> 12 in/min (300 mm/min)

## Static Shear

Substrate: Stainless Steel

Temperature	Value
22 °C (72 °F)	500 g/0.5 in <sup>2</sup> <sup>1</sup>
70 °C (158 °F)	250 g/0.5 in <sup>2</sup> <sup>1</sup>

<sup>1</sup> Holds 10,000 min.

Attribute Name	Value
Short Term Temperature Resistance	93 °C (200 °F) <sup>1</sup>
Long Term Temperature Resistance	70 °C (158 °F) <sup>2</sup>

<sup>1</sup> Short Term (minutes, hour)

<sup>2</sup> Long Term (day, weeks)

## Handling/Application Information

### Application Examples

Lens bonding, LCM attachment, bezel bonding.

### Application Techniques

**For maximum bond strength the surfaces should be thoroughly cleaned with a 50:50 mixture of isopropyl alcohol and water.** Consult manufacturers directions for use and precautions when using cleaning solvents. Ideal tape application is accomplished when temperature is between 21°C and 38°C (between 70°F and 100°F) and the bond is allowed to dwell 72 hours. Initial tape application to surfaces at temperatures below 10°C (50°F) is not recommended.

## Storage and Shelf Life

Store in original cartons at 4-38°C (40-100°F) and 0-95% relative humidity. Optimum storage conditions are 22°C (72°F) and 50% relative humidity. When stored under proper conditions, product retains its performance and properties for 24 months from date of manufacture.

## Available Sizes

Attribute Name	Width	Value
Core Size (ID)		76.2 mm (3 in)
Maximum Available Width		1170 mm (46 in)
Minimum Available Width		12.7 mm (0.5 in)
Minimum Length	1 inch(25.4 mm) to 8 inch(203 mm)	329 m (360 yd)
Minimum Length	All other	165 m (180 yd)
Normal Slitting Tolerance		± 0.8 mm (± 1/32 in)
Standard Roll Length		65.8 m (72 yd)

## 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:** 3M warrants for 24 months from the date of 3M manufacture that 3M™ VHB™ Tape will be free of defects in material and manufacture. 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. This warranty does not cover damage resulting from the use or inability to use 3M™ VHB™ Tape due to misuse, workmanship in application, or application or storage not in accordance with 3M recommended procedures (except to the extent 3M approves and issues a specific application warranty, for which the customer must apply, receive 3M approval, and meet all applicable warranty and process requirements, the additional details, terms, and conditions of which are available from 3M). 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, user instructions, warnings, and limitations, and the user must take any action required under any recall, field action or other product use notice. 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, visit [www.3M.com](http://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](http://3M.com/iatd)

3M and VHB are trademarks of 3M.  
©3M 2024 (6/24)



[www.marianinc.com](http://www.marianinc.com)

1-800-773-0062