



## 3M™ VHB™ Tape 86415, 86420, 86425, 86430

### Product Description

3M™ VHB™ Tapes 86415, 86420, 86425, 86430 are thin foam tapes with pressure sensitive adhesive on both sides and are 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.

### Key Features

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

### Product Construction/Material Description

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

3M™ VHB™ Tape 864xx	
Property	Value
Adhesive	Acrylic
Thickness	86415: 0.15 mm (0.006 in) 86420: 0.20 mm (0.008 in) 86425: 0.25 mm (0.010 in) 86430: 0.30 mm (0.012 in)
Density	960 kg/m <sup>3</sup> (60 lb/ft <sup>3</sup> )
Thickness Tolerance: (approx)	+/- 15%
Liner	0.075 mm (0.003 in) clear polyester
Tape Color	Black

### Applications

- Lens bonding
- LCM attachment
- Touch panel bonding
- 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 manufacturer's directions for use and precautions when using cleaning solvents. Ideal tape application is accomplished when temperature is between 21° and 38°C (between 70° 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.

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## Typical Physical Properties and Performance Characteristics

**Note:** The following technical information and data should be considered representative or typical only and should not be used for specification purposes. Final product specifications and testing methods will be outlined in the product's Certificate of Analysis (COA) that is shipped with the product.

<b>3M™ VHB™ Tape 864xx</b>	
<b>Property</b>	<b>Value</b>
<b>90 Degree Peel Adhesion for Stainless Steel (15 Minute Dwell) (Modified ASTM D3330)</b>	86415: 70 N/100 mm (4.0 lb/inch) 86420: 75 N/100 mm (4.3 lb/inch) 86425: 90 N/100 mm (5.1 lb/inch) 86430: 100 N/100 mm (5.7 lb/inch)
<b>90 Degree Peel Adhesion for Stainless Steel (72 Hour Dwell) (Modified ASTM D3330)</b>	86415: 90 N/100 mm (5.1 lb/inch) 86420: 105 N/100 mm (6.0 lb/inch) 86425: 115 N/100 mm (6.6 lb/inch) 86430: 140 N/100 mm (8.0 lb/inch)
<b>90 Degree Peel Adhesion for Glass (72 Hour Dwell) (Modified ASTM D3330)</b>	86415: 90 N/100 mm (5.1 lb/inch) 86420: 105 N/100 mm (6.0 lb/inch) 86425: 115 N/100 mm (6.6 lb/inch) 86430: 140 N/100 mm (8.0 lb/inch)
<b>90 Degree Peel Adhesion for Polycarbonate (72 Hour Dwell) (Modified ASTM D3330)</b>	86415: 80 N/100 mm (4.6 lb/inch) 86420: 90 N/100 mm (5.1 lb/inch) 86425: 110 N/100 mm (6.3 lb/inch) 86430: 125 N/100 mm (7.1 lb/inch)
<b>90 Degree Peel Adhesion for ABS (72 Hour Dwell) (Modified ASTM D3330)</b>	86415: 70 N/100 mm (4.0 lb/inch) 86420: 80 N/100 mm (4.6 lb/inch) 86425: 90 N/100 mm (5.1 lb/inch) 86430: 100 N/100 mm (5.7 lb/inch)
<b>90 Degree Peel Adhesion for Polypropylene (72 Hour Dwell) (Modified ASTM D3330)</b>	86415: 60 N/100 mm (3.4 lb/inch) 86420: 70 N/100 mm (4.0 lb/inch) 86425: 80 N/100 mm (4.6 lb/inch) 86430: 90 N/100 mm (5.1 lb/inch)
<b>Static Shear for Aluminum Foil to Stainless Steel (Modified ASTM D3654)</b>	22°C: 500 g/0.5 sq in (holds 10,000 min.) 70°C: 250 g/0.5 sq in (holds 10,000 min.)
<b>Temperature Resistance</b>	Short Term (Minutes, Hours): 93°C (200°F) Long Term (Days, Weeks): 70°C (158°F)
<b>Available Sizes</b>	Standard Length: 65.8 meters (72 yards) Slitting Tolerance: +/- 0.8 mm (1/32 in) Core size (ID): 76.2 mm (3.0 in)

## Storage and Shelf Life

The shelf life of 3M™ VHB™ Tapes 86415, 86420, 86425 and 86430 is 24 months from the date of manufacture when stored in the original packaging materials at 4°C to 38°C (40°F to 100°F) and 0-95% relative humidity. The optimum storage conditions are 22°C (72°F) and 50% relative humidity.

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**Safety Data Sheet:** Consult Safety Data Sheet before use.

**Regulatory:** For regulatory information about this product, contact your 3M representative.

**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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**Electronics Device Bonding**  
3M Center, Building 225-3S-06  
St. Paul, MN 55144-1000  
800-362-3550  
877-369-2923 (Fax)  
[www.3M.com/VHB](http://www.3M.com/VHB)

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