# VHB<sup>™</sup> Adhesive Transfer Tapes with High Performance Acrylic Adhesive 100MP F9460PC • F9469PC • F9473PC • 9460PC • 9469PC • 9473PC • 9469FL

# **Product Data Sheet**

Date: July 2018 Supersedes: May 2018

#### **Product Description**

3M™ VHB™ Adhesive Transfer Tapes F9460PC, 9460PC, F9469PC, 9469PC, 9469PL, F9473PC and 9473PC utilize the 3M™ High Performance Acrylic Adhesive 100MP, which has good long term holding power.

## **Key Features**

- For interior and exterior industrial applications to replace rivets, spot welds and other permanent fasteners.
- 3M™ VHB™ Adhesive Transfer Tapes are transparent

## **Physical Properties**

Products	F9460PC 9460PC	F9469PC 9469PC	F9473PC 9473PC
Adhesive thickness*	0,050 mm	0,125 mm	0,250 mm
Liner thickness * Liner weight Liner material Liner printing	0,100 mm 100 g/sqm Polycoated paper, brown Versions with "F" prefix have liner printing Versions without "F" have no printing		
Adhesive colour	<b>t</b> ransparent		

<sup>\*</sup>AFERA 5006

Products	9469FL
Adhesive thickness*	0,125 mm
Liner thickness * Liner weight Liner material	0,100 mm 100 g/sqm Polypropylene, unprinted
Adhesive colour	transparent

#### **Performance Characteristics**

Products	F9460PC 9460PC	F9469PC 9469PC 9469FL	F9473PC 9473PC
Adhesion to Stainless Steel (FTM2 - after 72 h RT using 50 µm aluminium foil)	12,0 N/cm	19,5 N/cm	19,5 N/cm
Adhesion to PET (FTM2 - after 72 h RT using 50 µm aluminium foil)	8,7 N/cm	11,1 N/cm	12,4 N/cm
Static Shear (FTM8 - 1000 g/25 mm* 12,5 mm on stainless steel, 150 °C)	> 10,000 M	inutes	

Immersion 7 days in Engine oil at 50 °C	No changes in appearance
Immersion 7 days in 5 % salt water	No changes in appearance
7 days high humidity chamber 38 °C, 100 RH	No changes in appearance
7 days automotive cycle 4 h -40 °C, 4 h 90 °C, 16 h 38 °C, 100 % RH	No changes in appearance
Storage 4 h at 260 °C	No changes in appearance
Immersion 1 h in Gasoline	No changes in appearance
Immersion 1 h 5 % H2SO4	No changes in appearance Slight adhesión loss 1 mm at edges
Immersion 1 h 5 % NaOH	No changes in appearance Slight adhesión loss 1 mm at edges

These 3M™ VHB™ Adhesive Transfer Tapes are made from the same adhesive system and are thermoplastic in nature, becoming softer as temperature increases and firmer as temperature decreases. As the adhesive becomes firmer, the adhesion performance generally increases. At low temperatures (lower than -40 °C, the 3M™ VHB™ Adhesive Transfer Tapes become very firm and glassy; the ability to absorb impact energy is reduced.

## **Application Techniques**

Bond strength is dependent upon the amount of adhesive-tosurface contact developed. Firm application pressure helps develop better adhesive contact and improve bond strength. To obtain optimum adhesion, the bonding surfaces must be clean, dry, and well unified. Some typical surface cleaning solvents are isopropyl alcohol/water mixture or heptane. \*

Ideal tape application temperature range is 21 °C to 38 °C. Initial tape application to surfaces at temperatures below 10 °C is not recommended because the adhesive becomes too firm to adhere readily. However, once properly applied, low temperature holding is generally satisfactory.

\*Note: Be sure to follow the manufacturer's precautions and directions for use when using solvents.

## Storage & Shelf Life Store at 16 °C - 25 °C and 40-65 % relative humidity in its original box. The product can be stored up to 18 months after production. **Recognition / Certification** UL-Recognised in File MH17478 **Precautionary Information** TSCA: These products are defined as articles under the Toxic Substances Certification Control Act and therefore, are exempt from inventory listing requirements. MSDS: These products are not subject to the MSDS requirements of the Occupational Safety and Health Administration's Hazard Communication Standard, 29 C.F.R. 1910.1200(b)(6)(v). When used under reasonable conditions or in accordance with the 3M directions for use, the products should not present a health and safety hazard. However, use or processing of the products in a manner not in accordance with the directions for use may affect their performance and present potential health and safety hazards. For Additional Information To request additional product information or to arrange for sales assistance, call..... Address correspondence to: 3M **Important Notice** All statements, technical information and recommendations contained in this document are based upon tests or experience that 3M believes are reliable. However, many factors beyond 3M's control can affect the use and performance of a 3M product in a particular application, including the conditions under which the product is used and the time and environmental conditions in which the product is expected to perform. Since these factors are uniquely within the user's knowledge and control, it is essential that the user evaluate the 3M product to determine whether it is fit for a particular purpose and suitable for the user's method or application. All questions of liability relating to this product are governed by the terms of the sale subject, where applicable, to the prevailing law

Values presented have been determined by standard test methods and are average values not to be used for specification purposes. Our recommendations on the use of our products are based on tests believed to be reliable but we would ask that you conduct your own tests to determine their suitability for your applications. This is because 3M cannot accept any responsibility or liability direct or consequential for loss or damage caused as a result of our recommendations

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## 3M United Kingdom PLC

2M Centre, Cain Road, Bracknell RG12 8HT United Kingdom

#### 3M Ireland Ltd

The Iveagh Building, 3rd Floor The Park, Carrickmines 18 Ireland

## 3M Belgium bvba/sprl

Hermeslaan 7 1831 Diegem Belgium

## 3M Nederland B.V.

Molengraaffsingel 29 2629 JD Delft The Netherlands

## 3M Svenska AB

Herrjärva torg 4 170 67 Solna Sweden

#### 3M a/s

Hannemanns Allé 53 DK-2300 Copenhagen S. Denmark

### 3M Norge AS

Tærudgata 16 2004 Lillestrøm Norway

#### Suomen 3M Oy

Keilaranta 6 02150 Espoo Finland

## 3M Eesti OÜ

Pärnu mnt. 158 11317 Tallinn Estonia

## 3M Latvia SIA

K.Ulmaņa gatve 5 Rīga, LV-1004 Latvia

## 3M Lietuva UAB

A.Goštauto g. 40 Vilnius LT- 03163 Lithuania