



F-9465PC Adhesive Transfer Tape

Product Data Sheet

Updated : January 1999
Supersedes : February 1997

Product Description 0.005 in. (0.13 mm) thick adhesive transfer tape designed to resist many of the plasticisers typically found in vinyls and plastics.

Physical Properties
Not for specification purposes

Adhesive Type	Acrylic	3M ref :
Carrier	None	
Thickness (ASTM D-3652) Tape Liner Total	0.13 mm 0.10 mm 0.23 mm	
Release Liner	Printed Tan Polycoated Paper Liner	
Tape Colour	Clear	
Shelf Life	24 months from date of despatch by 3M when stored in the original carton at 21°C (70°F) & 50 % Relative Humidity	

Performance Characteristics
Not for specification purposes

Adhesion to Stainless Steel ASTM D-3330	8.8 N/10mm	
Temperature Performance Max : Minutes / Hours Max : Days / Weeks	94°C 74°C	
Solvent Resistance	Good	
UV Light Resistance	Excellent	

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Additional Product Information

F-9465PC Tape is a 5 mil thick adhesive transfer tape which has been specifically formulated for bonding to flexible vinyls and to resist the effects of plasticiser migration. Vinyl formulations differ and plasticiser types and amounts can vary. The most common types of plasticised vinyl contain low molecular weight materials (plasticisers) which tend to migrate out of the vinyl. In the case of adhesive bonding, these plasticisers migrate into the adhesive causing softening of the adhesive and loss of bond strength over time.

The effect plasticiser migration has on an adhesive bond can be predicted by accelerated ageing for 5 days at elevated temperature (150°F). F-9465PC has been tested to various flexible vinyls including mouldings, gasketing material, cable jacketing, and flexible pocket folders. Tape 950 was recognised as being the most plasticiser resistant product in the adhesive transfer tape line. In laboratory testing, F-9465PC has demonstrated significantly better performance than 950 when bonding to plasticised vinyl materials.

Due to the variability of vinyl formulations, we strongly recommend each vinyl substrate be tested to determine the success of the application.

Natural and synthetic rubber materials such as neoprene and EPDM are also formulated with fillers and plasticisers. F-9465PC does not resist the effects of these particular fillers and is not recommended for use in bonding these materials.

Application Techniques

1. Bond strength is dependent upon the amount of adhesive-to-surface contact developed. Firm application pressure develops better adhesive contact & thus improves bond strength.

2. To obtain optimum adhesion, the bonding

surfaces must be clean dry and well unified. A typical surface cleaning solvent is isopropyl alcohol & water. Use proper safety precautions for handling solvents.

3. Ideal tape application temperature range is 21°C to 38°C (70°F to 100°F).

Initial tape application to surfaces at temperatures below 10°C (50°F) is not recommended because the adhesive becomes too firm to adhere readily. However once properly applied low temperature holding is generally satisfactory.

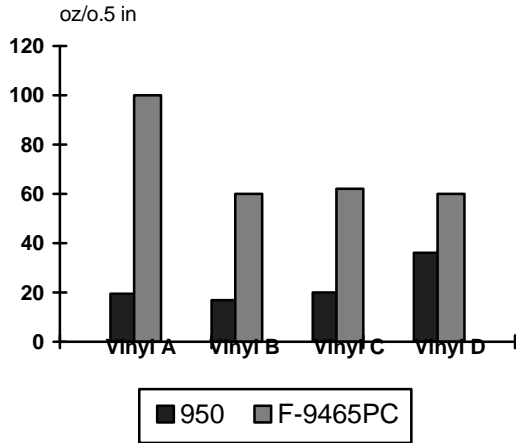
Applications

Laboratory tests carried out on a flexible medium plasticised PVC material indicated that ultimate adhesion to this PVC was at least 50% higher than to steel.

Laboratory tests also indicate that F-9465PC bond does not deteriorate significantly on this material, even after ageing tests F-9465PC bonds well even to highly plasticised PVC's (see graph below).

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Peel Adhesion to Flexible P.V.C. Aged 5 days at 158°F (70°C).



- Vinyl A - Low Plasticised PVC
- Vinyl B - Medium Plasticised PVC
- Vinyl C - Medium Plasticised PVC
- Vinyl D - Highly Plasticised PVC

ADDITIONAL INFORMATION : DISCLAIMER

As PVC materials can vary significantly in composition, it is advised that appropriate tests are carried out to determine the suitability of F-9465PC on materials.

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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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