



# 447DL Double Coated Tape

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## Product Data Sheet

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Updated : March 1996  
Supersedes : November 1995

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**Product Description**      447DL is printing plate mounting tape, double-coated with a firm rubber-resin pressure sensitive adhesive system. It features high shear holding power, good high temperature performance, good solvent resistance, and good adhesion to a wide variety of materials.

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**Physical Properties**  
Not for specification purposes

<b>Adhesive Type</b>	Firm Rubber	<b>3M ref</b> : R-30
<b>Carrier</b>	Vinyl Film	
<b>Thickness</b> (ASTM D-3652) Tape Liner (paper or film) each Total	250 µm 100 µm 450 µm	
<b>Release Liner</b>	Tan Polycoated Paper and Clear Film	
<b>Tape Colour</b>	Grey	
<b>Shelf Life</b>	12 months from date of despatch by 3M when stored in the original carton at 21°C (70°F) & 50 % Relative Humidity	

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**Performance Characteristics**  
Not for specification purposes

<b>Adhesion to Stainless Steel</b> ASTM D-3330	4.9 N/10mm	
<b>Temperature Performance</b> Max : Minutes / Hours Max : Days / Weeks	93 °C 65 °C	
<b>Solvent Resistance</b>	High	
<b>UV Light Resistance</b>	Not recommended for direct exposure to sunlight or other sources of ultra-violet light.	

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Tape

<b>Additional Product Information</b>	<p>447DL has excellent adhesion and holding power. This tape is frequently used to mount rubber and photopolymer printing plates to metal cylinders in flexographic and letterpress printing operations (stickyback).</p> <p>Good adhesive anchorage to the film carrier permits one-piece tape removability from both plate and cylinders.</p>	<p>In flexographic and letterpress plate mounting, it is recommended that the plate and stickyback laminate be precurved to avoid edge lifting.</p> <p>The second clear film liner provides a smooth adhesive surface, which results in a more consistent caliper of the tape. This feature helps to improve the overall print quality.</p>	<p>The use of supplemental adhesives or solvents to attempt to improve adhesion is not required or recommended. Evidence has shown that these procedures can often reduce tape holding power.</p> <p>The "DL" suffix on 447DL designates the product as being double lined.</p>
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<b>Application Techniques</b>	<p>1. Bond strength is dependent upon the amount of adhesive-to-surface contact developed. Firm application pressure develops better adhesive contact &amp; thus improves bond strength.</p> <p>2. To obtain optimum adhesion, the bonding</p>	<p>surfaces must be clean dry and well unified. A typical surface cleaning solvent is isopropyl alcohol &amp; water. Use proper safety precautions for handling solvents.</p> <p>3. Ideal tape application temperature range is 21°C to 38°C (70°F to 100°F).</p>	<p>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.</p>
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<b>Applications</b>	<p>447DL is well suited for bonding together a wide variety of similar and dissimilar materials such as rubbers, metals, glass, papers, paints, and many plastics.</p> <p><b>Some typical applications include:</b></p> <p>Mounting rubber and photopolymer printing plates.</p>	<p>Splicing films, foils, papers, fabrics etc.</p> <p>Holding objects where high shear forces are encountered.</p> <p>Particularly good adhesive for holding and mounting vinyl materials because of good resistance to softening from many vinyl plasticisers.</p>	<p>Holding grinding and polishing pads.</p> <p>Rug and carpet holding.</p> <p>Miscellaneous joining and holding uses.</p>
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### Specialty Tapes & Adhesives

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