

www.mactac.com

**DSS4501**

Revised: 02/2022 CNS

**Durascan® S Thermal Transfer Film**

Description	Applications and End Uses																										
<p><b>Product</b></p> <p>DSS4501 is a 3.2 mil thermal transfer printable coated white biaxially oriented polyethylene with a high tack permanent rubber-based adhesive and a 2.4 semi-bleached super calendared kraft liner.</p> <p><i>BS 5609 Compliant. This product conforms to BS 5609: 1986 Section 2 – ‘Marine and Laboratory Performance of Label Base Materials’.</i></p>	<p>Thermal transfer and prime labels requiring durability and an aggressive adhesive. Applications and markets include food, beverage, shipping, drum labels, piping, lumber, appliances, carpet backing, pallets.</p>																										
<p><b>Face</b></p> <p>A high-density polyethylene film, clay coated to provide an excellent thermal transfer printing surface.</p> <p><b>Physical Properties Without Adhesive</b></p> <table border="0"> <tr> <td>Caliper, inches</td> <td>0.0032 (3.2 mils)</td> <td>ASTM D-2103</td> </tr> <tr> <td>Tensile, ppiw</td> <td>23 MD 22 CD</td> <td>ASTM D-638</td> </tr> <tr> <td>Basis Weight, lbs. (25" x 38"/500 sheets)</td> <td>44 +/- 10%</td> <td>TAPPI T-410</td> </tr> </table>	Caliper, inches	0.0032 (3.2 mils)	ASTM D-2103	Tensile, ppiw	23 MD 22 CD	ASTM D-638	Basis Weight, lbs. (25" x 38"/500 sheets)	44 +/- 10%	TAPPI T-410																		
Caliper, inches	0.0032 (3.2 mils)	ASTM D-2103																									
Tensile, ppiw	23 MD 22 CD	ASTM D-638																									
Basis Weight, lbs. (25" x 38"/500 sheets)	44 +/- 10%	TAPPI T-410																									
<p><b>Adhesive</b></p> <p>705VHP is a high-tack rubber-based permanent adhesive formulated to provide excellent adhesion to many difficult substrates. The heavier coat weight of adhesive allows for good flow characteristics which permit adhesion to most rough textured surfaces.</p> <p><b>Physical Properties of Adhesive</b></p> <table border="0"> <tr> <td>Thickness, inches</td> <td>0.0014 +/- 10%</td> <td></td> </tr> <tr> <td>180° Peel Adhesion, lbs./in.</td> <td>HDPE: 3.7</td> <td>PSTC-101A (30 min. applied)</td> </tr> <tr> <td></td> <td>Stainless Steel: 5.4</td> <td></td> </tr> <tr> <td>Loop Tack (1"), lbs./in.</td> <td>HDPE: 3.5</td> <td>PSTC-16</td> </tr> <tr> <td></td> <td>Wood: 0.9</td> <td></td> </tr> <tr> <td>Temperature Ranges</td> <td></td> <td></td> </tr> <tr> <td>Minimum Application</td> <td>+20°F (-7°C)</td> <td>CTM #45 Curwood</td> </tr> <tr> <td>Service Ranges</td> <td>-65°F to +160°F (-54°C to +71°C)</td> <td>Polyester Film Dry Surface</td> </tr> </table>	Thickness, inches	0.0014 +/- 10%		180° Peel Adhesion, lbs./in.	HDPE: 3.7	PSTC-101A (30 min. applied)		Stainless Steel: 5.4		Loop Tack (1"), lbs./in.	HDPE: 3.5	PSTC-16		Wood: 0.9		Temperature Ranges			Minimum Application	+20°F (-7°C)	CTM #45 Curwood	Service Ranges	-65°F to +160°F (-54°C to +71°C)	Polyester Film Dry Surface			
Thickness, inches	0.0014 +/- 10%																										
180° Peel Adhesion, lbs./in.	HDPE: 3.7	PSTC-101A (30 min. applied)																									
	Stainless Steel: 5.4																										
Loop Tack (1"), lbs./in.	HDPE: 3.5	PSTC-16																									
	Wood: 0.9																										
Temperature Ranges																											
Minimum Application	+20°F (-7°C)	CTM #45 Curwood																									
Service Ranges	-65°F to +160°F (-54°C to +71°C)	Polyester Film Dry Surface																									
<p><b>Liner</b></p> <p>A semi-bleached super calendared kraft liner excellent for die cutting, stripping and label dispensing. Primarily for roll-to-roll applications.</p> <table border="0"> <tr> <td>Caliper, inches</td> <td>0.0024 +/- 10%</td> <td>TAPPI T-411</td> </tr> <tr> <td>Basis Weight, lbs. (24" x 36"/500 sheets)</td> <td>40 +/- 10%</td> <td>TAPPI T-410</td> </tr> </table>	Caliper, inches	0.0024 +/- 10%	TAPPI T-411	Basis Weight, lbs. (24" x 36"/500 sheets)	40 +/- 10%	TAPPI T-410																					
Caliper, inches	0.0024 +/- 10%	TAPPI T-411																									
Basis Weight, lbs. (24" x 36"/500 sheets)	40 +/- 10%	TAPPI T-410																									
<p><b>Shelf Life</b></p> <p>One year when stored at 72° F and 50% R.H.</p>																											

Durascan is a registered trademark of the Morgan Adhesives Company

The user is responsible for determining the product's suitability for all aspects of the application. If there are any questions about applications, please contact your MACTac sales representative to discuss your requirements for recommendations. If this is a printed Performance Guide, it is an uncontrolled document. Please check the Mactac website for the latest most up-to-date version at [www.mactac.com](http://www.mactac.com).

**\* NOTE: Thermal transfer printing quality and bar code scannability are dependent upon the interworking of several elements; the ribbon, the printhead and the facestock. Please test all applications. Consult MACTac's Technical Marketing Department for guidelines regarding printer and ribbon compatibility.**

**CALL 1-800-548-3456 for additional product information**

**IMPORTANT NOTICE:** The information given, and the recommendations made herein are based on our research and are believed to be accurate, but no guarantee of their accuracy or completeness is made. In every case, user shall determine before using any product in full scale production, or in any way, whether such product is suitable for user's intended use for their particular purpose under their own operating conditions. User assumes all risk and liability whatsoever in connection with their use of any product. The products discussed herein are sold without any warranty as to merchantability or fitness for a particular purpose, or any other warranty, express or implied. No representative of ours has any authority to waive or change the foregoing provisions, and no statement or recommendation not contained herein shall have any force of effect unless in an agreement signed by the officers of seller and manufacturer. Nothing contained herein shall be construed to imply the nonexistence of any relevant patents or to constitute a permission, inducement, or recommendation to practice any invention covered by any patent without authority from the owner of the patent. The following is made in lieu of all warranties, express or implied: Seller's and manufacturer's only obligation shall be to replace or credit such quantity of the product proved to be defective at its discretion.

<sup>TM</sup> Trademark of Morgan Adhesives Company.

<sup>®</sup> Registered Trademark of Morgan Adhesives Company.

