



Double Coated Tissue Tape 91091

Technical Data Sheet

June 2014

DESCRIPTION

3M™ 91091 is a 3.5 mil thick double coated tissue tape with an acrylic adhesive on both sides. The tissue carrier provides dimensional stability and improved handling. The tape is good for bonding high surface energy materials.

PHYSICAL PROPERTIES: (Not for specification purpose, Calipers are nominal values)

Adhesive	:	General Purpose Acrylic
Carrier	:	Tissue
Tape thickness	:	0.09 mm ± 0.005 mm
Liner	:	125 gsm PCK, 3M Logo printed in Grey

FEATURES:

- 3M™ is a solvent based general purpose acrylic adhesives used in the tape construction is ideal for bonding applications requiring medium to high adhesion to a wide variety of materials including metals and high surface energy plastics.
 - 3M™ Double Coated Tape 91091 has a heavy 125 gsm Polycoated Kraft (PCK) liner for improved lay-flat properties and moisture stability.
 - UL Listed (MH 48050)
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APPLICATION IDEAS:

- The soft construction of tissue tape makes this product ideal for many mounting and gasketing applications involving irregular surfaces
 - This tape is formulated for general purpose bonding application for indoor and moderate outdoor environments
 - Other application ideas are attaching trims, labels, fabric, web splicing and end tabbing etc.
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PERFORMANCE PROPERTIES (Not for specification purpose)

1. Peel Adhesion on different substrates

180 degree peel (Ref ASTM D3330; jaw speed 305 mm/min, 72 hours dwell)

Surface	N/inch
Stainless Steel	16
Polycarbonate	15

2. Temperature Resistance

Short term (minutes/hours)	:	120 deg C
Long term (days/weeks)	:	80 deg C

Application Techniques

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

Note: Carefully read and follow the manufacturer's precautions and directions for use when working with solvents.

Ideal tape application temperature range is 70°F to 100°F (21°C to 38°C). Initial tape application to surfaces at temperatures below 50°F (10°C) is not recommended because the adhesive becomes too firm to adhere readily. However, once properly applied, low temperature holding is generally satisfactory.

All pressure sensitive adhesives require a certain amount of "dwell time" to achieve maximum adhesion. In most instances, ultimate adhesion will occur within 72 hours (at ambient temperature) after the bond has been made. For this reason, it is preferable to wait 72 hours before evaluating adhesive performance.

Shelf Life

24 months from date of manufacture when stored in original carton at 70F (22C) and 50%RH relative humidity

Product Use

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