

Double Coated Tissue Tapes 6615

Technical Data 10, 2013

Product Description

6615 is a double coated pressure sensitive adhesive tape. High adhesion acrylic pressure sensitive adhesive is coated on both sides of flexible tissue carrier. High adhesion acrylic pressure sensitive adhesive provides good bonding strength on many types of substrate including low surface energy plastics on which most acrylic adhesive cannot adhere well. Soft acrylic adhesive can easily wet rough surface and establish good bonding strength. Polycoated paper liner is chosen to provide good humidity resistance and easy convertibility.

Construction Information

Liner
Backside Adhesive
Carrier
Faceside Adhesive

Product	Faceside Adhesive Thickness (mm)	Carrier Type Carrier Thickness (mm)	Backside Adhesive Thickness (mm)	Liner Type Liner Thickness (mm)	Liner Color	Tape Thickness Without Liner (mm)
6615	0.075	Tissue 0.03	0.075	PCK liner 0.13	White	0.15

Note: Backside adhesive is on the interior of the roll, exposed when liner is removed; Faceside adhesive is on the exterior of the roll, exposed when unwound.

The thickness listed is based on a calculation from manufacturing controlled adhesive coat weights using a density of 1.012 g/cc. While past data pages have listed nominal thicknesses, the coat weight (and theoretical caliper) has not changed.

Typical Physical Properties and Performance Characteristics

180° peel strength on different substrates (N/mm)

Test method: ASTM D3330; Backing material: 2mil polyester film; Test speed: 304.8 mm/min

Note: The following technical information and data should be considered representative or typical only and should not be used for specification purposes.

	SS	PP	PC	ABS	Al	Glass
Dwell 30 min	1.00	0.80	0.90	0.90	0.80	0.90
Dwell 3 day	1.20	0.85	1.00	0.95	0.85	0.95

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Static Shear Strength

Temperature	Size	Weight	Minutes
72° (23°C) 50%RH	1" x 1"	1000 grams	10000
158°F (70°C) 50% RH	1" x 1"	500 grams	5000

^{*} Test method: ASTM D3654 *Test terminated at 10,000 minutes

Environmental Performance

Humidity Resistance – High humidity has a minimal effect on adhesive performance. Bond strength (is generally higher/shows no significant reduction) after exposure for 7 days at 90°F (32°C) and 90% relative humidity.

UV Resistance – When properly applied, nameplates and decorative trim parts are not adversely affected by outdoor exposure.

Temperature Cycling Resistance – High bond strength (is maintained /increases) after cycling four times through:

4 hours at 158°F (70°C)

4 hours at -20°F (-29°C)

4 hours at 73°F (22°C)

Chemical Resistance – When properly applied, nameplate and decorative trim parts will hold securely after exposure to numerous chemicals including oil, mild acids and alkalis.

Bond Build-up: The bond strength of 3MTM double coated tissue tape 6615 increases as a function of time.

Lower Temperature Service Limit: 50°F (10°C).

Application Ideas

Nameplate bonding

Plastic film lamination/bonding

Foam bonding

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

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

Master Width		
Master Width	Product	Master Width
	6615	1200 mm

Storage It is suggested that products are stored at room temperature conditions of 70°F (21°C) and 50% relative humidity.

Shelf Life If stored properly, product retains its performance and properties for 24 months from date of shipment.

Recognition/Certification

TSCA: This product is defined as an article under the Toxic Substances Control Act and therefore, it is exempt from inventory listing requirements

MSDS: 3M has not prepared a MSDS for this product which is not subjected 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, this product should not present a health and safety hazard. However, use or processing of the product in a manner not in accordance with the directions for use may affect its performance and present potential health and safety hazards.

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Technical Information

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Product Use

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For more information contact your local 3M representative

3M

Industrial Adhesives & Tapes Division Converter Markets 3M Maxdo, Xingyi Road 8

Shanghai, PRC.