



Low Fogging Adhesive Transfer Tape

6038PC • 6038PL

Technical Data

July, 1998

Description 3M™ Low Fogging Adhesive Transfer Tape 6038 is an 8.0 mil pressure-sensitive transfer tape which is specially formulated to be low fogging with good adhesion to many surface energy materials. This tape is ideal for use in automotive interior applications.

Construction	Product	Tape 6038PC	Tape 6038PL
	Adhesive:	8.0 mils (203 microns) #300MP Acrylic Adhesive	8.0 mils (203 microns) #300MP Acrylic Adhesive
	Liner:	4.2 mils (107 microns) 58# Polycoated Kraft Paper	6.4 mils (163 microns) 86# Polycoated Kraft Paper

- Features**
- Low fogging acrylic adhesive that meets OEM fogging specifications.
 - 8.0 mil adhesive that provides excellent bond to a wide variety of highly textured surfaces.
 - Excellent shear and peel values to both high and low energy surfaces (PP, ABS, painted metal)
 - High initial tack for quick and easy assembly line application.
 - High temperature resistance to withstand environmental conditions normally associated with automotive interiors.
 - A selection of high performance liners to meet most die-cutting and processing needs.

- Application Ideas**
- Attaching a wide variety of vibration and sound damping materials.
 - Attaching the wiring harness to the automobile headliner.
 - Attaching carpet and fabric to doors and interior panels.
 - Attaching glass to rearview mirror assembly.

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Typical Physical Performance

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

Flammability Test: (FMVSS 302/SAE J369)							Pass
Automotive Fogging Test: SAE J1756 @ 100°C							99
Adhesion:							ASTM D-3330 (modified) 90° Peel, 12"/minute (305 mm/minute), 2 mil aluminum foil to various surfaces.
Surface	15 Minute Dwell		72 Hour Dwell		72 Hour Dwell @ 158°F		
	Oz./In.	N/100 mm	Oz./In.	N/100 mm	Oz./In.	N/100 mm	
Stainless Steel	165	181	210	230	247	270	
Polycarbonate (High Surface Energy Plastic)	125	137	146	160	106	116	
Polypropylene (Low Surface Energy Plastic)	NA	NA	96	105	82	90	
ABS	NA	NA	143	157	120	131	

Environmental Performance

Temperature Resistance:	Short term: 250°F (121°C).
Humidity Resistance:	No adverse effect on the bond after exposure to 100% relative humidity at 100°F (38°C).
U.V. Resistance:	Adhesive is resistant to oxidation and ozone when exposed to air or ultraviolet light.
Bond Build-Up:	The bond strength of the adhesive increases as a function of time and temperature.
Shelf Life:	Product retains its performance properties for two years from date of manufacture if properly stored at room temperature conditions of 72°F (22°C) and 50% relative humidity.

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Environmental Performance
(continued)

Properties defined below are based on sample attachment to a stainless steel faceplate material with a 0.002 inch aluminum foil backing. Values are listed in ounces per inch based on a 90° peel at 12 inches/minute (305 mm/minute) after a 24 hour dwell. This data is provided as a guideline for the effects on adhesion at the following conditions and should not be used for specification purposes.

Test Condition	Oz./Inch	N/100 mm
Unleaded Gas - 1 hr. @ R.T.	127	139
Methyl Ethyl Ketone - 1 hr. @ R.T.	93	102
Oil (10W30) - 72 hrs. @ 120°F (49°C)	179	196
Weak Acid (pH 4) - 4 hrs. @ R.T.	139	152
Weak Base (pH 10) - 4 hrs. @ R.T.	132	145
Water - 100 hrs. @ R.T.	139	152
7 days @ 90°F (32°C) and 90% R.H.	215	235
Sodium Chloride Solution (5%) - 72 hrs. @ R.T.	203	222
Ultraviolet Light - 30 days exposure	220	241
Temperature Cycling - 4 hrs. @ 158°F (70°C); 4 hrs. @ -20°F (-29°C); 16 hrs. @ R.T. - repeated three times	200	219

**Special Considerations/
Application Tips**

- For maximum bond strength the surface should be thoroughly cleaned and dried. Typical cleaning solvents are heptane or isopropyl alcohol.

Note: Follow the manufacturer’s precautions and directions for use when using solvents.

- Bond strength can also be improved with firm application pressure and moderate heat causing the adhesive to develop intimate contact with the bonding surface.
- Ideal adhesive application temperature range is 70°F to 100°F (21°C to 38°C). This is not recommended for application to surfaces at temperatures below 50°F (10°C) because the adhesive becomes too firm to adhere readily. Once properly applied, low temperature holding is satisfactory.

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For Additional Information

To request additional product information or to arrange for sales assistance, call toll free 1-800-362-3550. Address correspondence to: 3M Bonding Systems Division, 3M Center, Building 220-7E-01, St. Paul, MN 55144-1000. Our fax number is 651-733-9175. In Canada, phone: 1-800-364-3577. In Puerto Rico, phone: 1-809-750-3000. In Mexico, phone: 5-728-2180.

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