



Technical Data Sheet

3M™ Adhesive Transfer Tape 6038PL



[Regulatory Info/SDS](#)

Product Description

Finite Element Analysis (FEA) data is available for this product at: 3m.com/FEA

3M™ Acrylic Adhesive Transfer Tape 6038PL is a 8 mil transfer tape formulated for low fog characteristics. The 300MP adhesive is suitable for bonding to most substrates including foams, fabrics and substrates with rough or textured surfaces.

General Information

- 3M 6038PL meets automotive OEM fogging specifications
- Provides excellent bond to a wide variety of surfaces.
- High initial tack for quick and easy assembly line application.
- High temperature resistance to withstand environmental conditions normally associated with automotive interiors.

Technical Information Note

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

Typical Physical Properties

Attribute Name	Test Method	Value
Adhesive Type		300MP Acrylic
Total Tape Thickness	ASTM D3652	0.203 mm (8 mil)
Liner		83# Polycoated Kraft Paper
Liner Thickness		0.157 mm (6.2 mil)

Typical Performance Characteristics

90° Peel Adhesion

Backing: 2 mil Aluminum Foil

Test Method: ASTM D3330

Dwell Time	Temperature	Substrate	Value
15 min	22 °C (72 °F)	Polycarbonate (PC)	13.7 N/cm (125 oz/in) ¹
15 min	22 °C (72 °F)	Stainless Steel	18.1 N/cm (165 oz/in) ¹
72 h	22 °C (72 °F)	ABS	15.7 N/cm (143 oz/in) ¹
72 h	22 °C (72 °F)	Polycarbonate (PC)	16 N/cm (146 oz/in) ¹
72 h	22 °C (72 °F)	Polypropylene (PP)	10.5 N/cm (96 oz/in) ¹
72 h	22 °C (72 °F)	Stainless Steel	23 N/cm (210 oz/in) ¹
72 h	70 °C (158 °F)	ABS	13.1 N/cm (120 oz/in) ¹
72 h	70 °C (158 °F)	Polycarbonate (PC)	11.6 N/cm (106 oz/in) ¹
72 h	70 °C (158 °F)	Polypropylene (PP)	9 N/cm (82 oz/in) ¹
72 h	70 °C (158 °F)	Stainless Steel	27 N/cm (247 oz/in) ¹

¹ 12 in/min (300 mm/min)

Attribute Name	Value
Short Term Temperature Resistance	121 °C (250 °F) ¹
Long Term Temperature Resistance	93 °C (200 °F) ²
Flammability Test	Pass FMVSS 302/SAE J369

¹ Short Term (minutes, hour)

² Long Term (day, weeks)

Typical Environmental Performance

90° Peel Adhesion

Substrate: Stainless Steel

Backing: 2 mil Aluminum Foil

Dwell Time	Temperature	Environmental Condition	Value
1 h	22 °C (72 °F)	Gasoline	13.9 N/cm (127 oz/in) ¹
1 h	22 °C (72 °F)	MEK	10.2 N/cm (93 oz/in) ¹
4 h	22 °C (72 °F)	Weak Acid (pH 4)	15.2 N/cm (139 oz/in) ¹
4 h	22 °C (72 °F)	Weak Base (pH 10)	14.5 N/cm (132 oz/in) ¹
72 h	22 °C (72 °F)	Salt water (5 wt% in water)	22.2 N/cm (203 oz/in) ¹
72 h	49 °C (120 °F)	Oil 10W30	19.6 N/cm (179 oz/in) ¹
72 h		Temperature Cycling: 4 Hours at 70°C (158°F). 4 Hours at -29°C (-20°F). 16 Hours at 22°C (72°F). Repeat three times	24.1 N/cm (200 oz/in) ¹
100 h	22 °C (72 °F)	Water	15.2 N/cm (139 oz/in) ¹
7 d	32 °C (90 °F)	90%RH	23.5 N/cm (215 oz/in) ¹
30 d	22 °C (72 °F)	UV exposure	24.1 N/cm (220 oz/in) ¹

¹ 12 in/min (300 mm/min)

Attribute Name	Temperature	Value
Automotive Fogging Test	100 °C (212 °F)	99
UV Resistance		Adhesive is resistant to oxidation and ozone when exposed to air or ultraviolet light.

Typical Environmental Characteristics

Bond Build-Up

The bond strength of the adhesive increases as a function of time and temperature.

Humidity Resistance

No adverse effect on the bond after exposure to 100% relative humidity at 100°F (38°C)

Storage and Shelf Life

Store under normal conditions of 16° to 27°C (60° to 80°F) and 40 to 60% relative humidity in the original packaging, out of direct sunlight. For best performance, use this product within 24 months from date of manufacture.

Automotive Disclaimer

Select Automotive Applications:

This product is an industrial product and has not been designed or tested for use in certain automotive applications, such as automotive electric powertrain battery or high voltage applications, which may require the product to be manufactured in a IATF certified facility, meet a Ppk of 1.33 for all properties, undergo an automotive production part approval process (PPAP), or fully adhere to automotive design or quality system requirements (e.g., IATF 16949 or VDA 6.3). Customer assumes all responsibility and risk if customer chooses to use this product in these applications.

Information

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ISO Statement

This product was manufactured under a 3M quality system registered to ISO 9001 standards.

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