

3M™ Adhesion Promoter 86A

Technical Data Sheet

Description

3M™ Adhesion Promoter 86A is a liquid “primer” designed to be used with 3M™ Polyurethane Protective Tapes and Boots and other acrylic adhesives to enhance initial adhesion in demanding situations.

3M™ Adhesion Promoter 86A is designed to promote faster initial adhesion to certain types of surfaces, such as polyurethane paint, epoxy primers, or epoxy composites.

Product:	Pkg:	UPC:	NSN:
7" x 7" wipes	5 packets/bag, 1 bag/case	021200-96361-2	8040-01-448-4791
Product:	Pkg:	UPC:	NSN:
1 pint can	12 pints/case	021200-31592-3	8040-01-450-9187

Typical Performance Characteristics

3M™ Adhesion Promoter 86A allows for faster initial adhesion build rate of 3M™ Polyurethane Protective Tapes and Boots with acrylic adhesives to certain surfaces.

180° Peel Adhesion @ 74° F (23° C) to:	Test Method	Units	Dwell Time	Results with 3M™ 8673	Results with 3M™ 8663HS				
G10 Epoxy Glass Composite	ASTM D1000 Dwell at 74 °F / 50% RH	oz/in (N/100mm)	1 hour	110 (121)	82 (90)				
			24 hour	95 (104)	84 (92)				
			28 days	114 (125)	95 (104)				
			60 days	126 (137)	101 (111)				
MIL-PRF-85285 Type IV topcoat			ASTM D1000 Dwell at 74 °F / 50% RH	oz/in (N/100mm)	1 hour	52 (57)	52 (57)		
					24 hour	56 (62)	72 (79)		
					28 days	112 (122)	91 (100)		
					60 days	84 (92)	71 (78)		
PPG CA8000 Polyurethane Paint					ASTM D1000 Dwell at 74 °F / 50% RH	oz/in (N/100mm)	1 hour	120 (131)	89 (98)
							24 hour	93 (102)	68 (75)
							28 days	98 (108)	63 (69)
							60 days	97 (106)	69 (75)
Nickel	ASTM D1000 Dwell at 74 °F / 50% RH	oz/in (N/100mm)					1 hour	104 (114)	66 (72)

		24 hour	73 (79)	73 (80)
		28 days	56 (61)	85 (93)
		60 days	66 (72)	67 (73)
Titanium		1 hour	108 (119)	76 (84)
		24 hour	94 (102)	84 (92)
		28 days	105 (115)	95 (104)
2024 T3 Bare Aluminum		60 days	114 (124)	95 (104)
		1 hour	112 (123)	25 (27)
		24 hour	64 (70)	64 (70)
		28 days	83 (91)	92 (101)
		60 days	101 (111)	94 (103)

Note: A cheese cloth moistened with 3M™ Adhesion Promoter 86A was applied and allowed to dry for at least 10 minutes prior to tape application

Note: 3M™ Polyurethane Protective Tape Application Solution was used to apply the tape on the 3M™ Adhesion Promoter 86A

Application Use

*Note: When using this product and/or any additional solvents, extinguish all ignition sources, including pilot lights. Read and follow the product labeling and SDS warnings and directions for use.

Surface Preparation

The bonding surface must be smooth, clean, dry and free of foreign matter. If necessary, the surface should be sanded to the smoothness attainable with 320 grit sandpaper. Clean the surface with isopropyl alcohol* and allow the surface to dry prior to the application of 3M™ Adhesion Promoter 86A. Repositioning tape after application onto 3M™ Adhesion Promoter 86A is not recommended.

Note: Towels or cloths used in the cleaning process should be untreated and lint free (i.e. - cheesecloth or low-lint Kimwipes™ Disposable Wipes).

Apply 3M™ Adhesion Promoter 86A

Wipe the surface with the pre-saturated 3M™ Adhesion Promoter 86A wipe or with cheesecloth wetted with 3M™ Adhesion Promoter 86A, using the minimum amount that will coat desired surface. **More is not better.** Allow to dry for 10 minutes. For best results, apply 3M™ Polyurethane Protective Tape with acrylic adhesive within two hours to the promoted surface.

Note: In many applications only the outer most edges of the application area may require use of 3M™ Adhesion Promoter 86A.

Note: 3M™ Tape and Boot applications over 3M™ Adhesion Promoter 86A will be more difficult to remove.

Note: If desired, 3M™ Adhesion Promoter 86A may be sprayed on the surface, using most conventional spray equipment. If dilution is required, it may be done with isopropyl alcohol.*

Typical Physical Properties and Performance Characteristics

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

Property

Active Ingredient	Polyamide Resin
Solvent	Isopropyl Alcohol, N-Propyl Alcohol
Solids	6.5%
Color	Transparent, Colorless
Viscosity	Approximately 100 cps
Flashpoint	53°F (12°C) Flammable Liquid
Package Size	Pint 16 ounces (473 ml) Pre-saturated Wipes 7 in. x 7 in. (177 mm x 177 mm) 5 pre-packaged wipes in pouch
Net Weight	0.95 lbs./pint
Storage	Store at 60-80°F (16-27°C). Lower temperature storage will cause 3M 86A Promoter to gel. See Precautionary Information.
Shelf Life	Two (2) years from date of manufacture

Precautionary Information

If gelling occurs, place the can of 3M™ Adhesion Promoter 86A into a Ziploc® plastic bag to keep can and label dry. Place the can of 3M™ Adhesion Promoter 86A into a container of hot tap water (120-140°F [49-60°C] max.) for 30 minutes. The gels will go back into solution with no performance effects on the product. **WARNING: This is a flammable liquid!** Do not heat in boiling water or on top of stove/hot plate, in oven or open flames.

Regulatory Information

Refer to Product Label and Safety Data Sheet for health and safety information before using this product. For additional health and safety information, visit www.3M.com/sds or call 1-800-364-3577 or (651) 737-6501. Consult local air quality rules and regulations which may regulate product use.

Contact Information

The information provided in this technical document is intended as a guide for this product. For more information or help in selecting a 3M product for an application, please contact your 3M application engineering representative or [connect with a 3M expert](#).

Authorization to Use

Ensure products meet all applicable specifications, standards, and maintenance manual requirements for the platform being worked on and validate all aircraft approvals against current technical documentation.

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