



# Adhesion Promoter AP86A

## For Use with 3M™ Cushion-Mount™ Plus Plate Mounting Tapes

Technical Bulletin

October 2016

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Description	<p>3M™ Adhesion Promoter AP86A incorporates several unique features:</p> <ul style="list-style-type: none"><li>• Easy to apply adhesion promoter to increase the bond between photopolymer plates and flexographic plate mounting tapes to prevent plate edges from lifting on press.</li><li>• Is available in an easy to use ampule (~ 1 ml) for one time use.</li><li>• Or, is available in a large applicator (~30 ml) with re-sealable top for multiple uses with a ¼” by ¾” tip.</li></ul>
Plate Mounting – Surface Preparation	<p>Proper surface preparation is important to ensure that the plate mounting tape will develop consistent and optimum adhesion between both the back of the photopolymer printing plate and the cylinder or sleeve.</p>

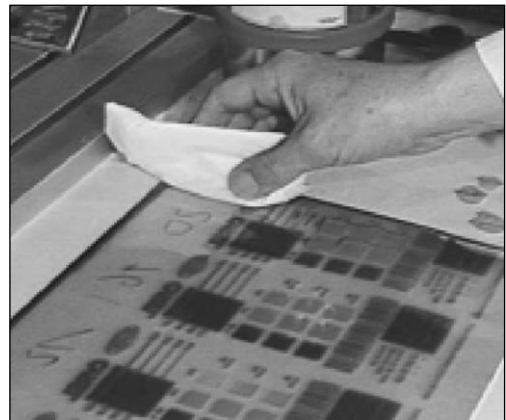
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### Plate Cleaning:

It is critical that the surface of the back of the plate, including new and previously run plates, be clean and free of contamination prior to mounting.

- Thoroughly wash back of plate using a 50:50 mixture of isopropanol and water or a range of IPA up to 100%.
- If there is a significant build-up of contaminants, a mild solvent should be used to cut the contamination, followed by a wash with isopropanol.
- Wipe surface with a clean, dry lint-free cloth.

Please note: New photopolymer plates may contain residues from the photopolymer plate making process. This residue can lead to plate lifting and must be removed prior to mounting plates. Wash using isopropanol to remove this photopolymer residue.



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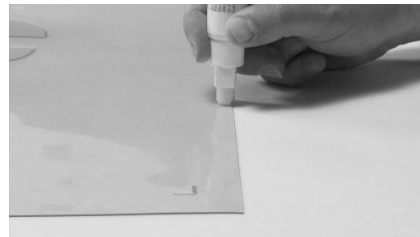
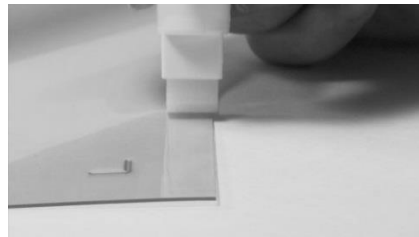
### Plate Edge Priming

3M™ Adhesion Promoter AP86A may be used to build the bond between the plate and the tape to prevent plate edges from lifting. This technique can be used for added confidence that plate edges will not lift on press.

- 3M™ Adhesion Promoter AP86A can be applied along the lead and trail edge of the plate to increase adhesion to the plate.
- Use AP86A on small repeat lengths, thick plates, or long press runs to reduce the chances of plate lifting on-press.



- Shake AP86A well before using.
- When using the 1.1 ml ampule, press the 'dot' on the ampule to break the inner vial and release the adhesion promoter. Slightly squeeze to allow for liquid to wet the tip of the ampule. Apply to the lead and trail edge of the photopolymer plate. Use a minimum amount to wet the surface. More is not better.
- When using the 30 ml large applicator, remove the top. The large applicator is a spring loaded system, so on the first use, you may have to 'prime the pump' 30-50 times to wet the tip. Once the tip is saturated, apply either to the lead or trail edge (you can adjust the direction of the tip to determine the desired amount). Use a minimum amount to wet the surface. More is not better.



- Once applied, recap the applicator to prevent tip from drying out.
- Allow AP86A to dry thoroughly before applying tape. This is usually accomplished in less than a minute at room temperature, but may require more time depending on the environmental conditions.
- Mount the photopolymer plate to the tape.
- Clean AP86A from the back of the plate after demounting using isopropanol.

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### Plate Mounting Techniques

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#### Mounting Plate to Tape:

Remove the film liner from the tape, mount and register the plate. The micro channels in the plate side adhesive allow the plate to be easily mounted to the tape with virtually no air entrapment.

- Using a rubber roller, roll down the entire plate surface, including image area, floor and especially the lead and trail edges of the plate.
- This will ensure uniform and intimate contact is achieved between the plate and the tape.

Trim excess tape: The total tape area used should exceed the size of the plate by a minimum of 0.5 inches (12.7 mm) around the perimeter of the plate. Using a 0.5-inch margin of tape.

#### 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	54 °F (12 °C), Flammable Liquid
Package Size	1.1 ml Ampule or 30 ml Large Applicator
New Weight	.95 lbs/pint

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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 3M™ Adhesion Promoter 86A into a zip-lock plastic bag to keep dry. Place the AP86A 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. Refer to Product Label and Material Safety Data Sheet for health and safety information before using this product. For additional health and safety information, visit [www.3M.com/msds](http://www.3M.com/msds) or call 1-800-364-3577 or (651) 737-6501. Consult local air quality rules and regulations which may regulate product use.

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<b>Technical Information</b>	The technical information, recommendations and other statements contained in this document are based upon tests or experience that 3M believes are reliable, but the accuracy or completeness of such information is not guaranteed.
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ISO 9001:2000

This Industrial Adhesives and Tapes Division product was manufactured under a 3M quality system registered to ISO 9001:2000 standards.



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