

DuPont™ Tedlar®

polyvinyl fluoride film

Flexible Product Adhesives for Use with DuPont™ Tedlar® Polyvinyl Fluoride Film

Flexible product adhesives are versatile acrylic adhesives developed specifically, but not exclusively, for use in laminating *Tedlar*® PVF film to a variety of substrates. With these adhesives, high-quality, long-lasting bonds can be achieved to meet demanding quality control specifications of manufacturers nationwide.

Acrylic adhesive 68040 is thermoplastic, but can be cured with epoxy resin to give thermoset properties. It has been used to bond *Tedlar*®, vinyls, aluminum foil, Nomex®, nylon, paper, and wood products.

Resin solution 68065 and acrylic adhesive 68070 have been used to bond *Tedlar*® to aluminum and galvanized steel in various gauges. 68065 is a dispersion of corrosion-inhibiting pigment and epoxide polymer in toluene. It is formulated to be used in conjunction with 68070 at a ratio of 1 gal of 68065 to 15 gal of 68070. 68065 is soft settling, and the dispersion must be shaken just prior to use.

Acrylic adhesive 68080 is a liquid acrylic adhesive that can be pre-applied to *Tedlar*® to facilitate lamination of products for interiors, such as vinyl wall coverings, and for exteriors, such as architectural siding.

Ordering Information

Containers: Acrylic adhesives 68040, 68070, and 68080 are available in 55-gal drums and 5-gal pails. Resin solution 68065 is available in 1-gal containers.

Conditions: All orders are accepted subject to, and sales are made in accordance with our Standard Conditions of Sale, which are printed on the back of our Invoice and Order Acknowledgment forms.

Copies of Standard Conditions may be obtained by calling the Customer Service Center. Unless otherwise expressed in writing, DuPont makes no warranty as to the suitability of flexible product adhesive 68040, 68070, or 68080 and resin solution 68065 for any particular purpose and assumes no obligation or liability for application information herein. Buyer must adequately test and assume all risks for the use of flexible product adhesive 68040, 68070, or 68080 and resin solution 68065 in his or her application.

Billing: Minimum billing is \$200 per invoice. Terms are net 30 days from date of invoice. Invoices not paid at maturity are subject to a late payment service charge. Prices are FOB our plant, freight collect to destination. The 55-gal drums are the property of the buyer. Buyer is responsible for proper disposal of drums.

Safety Precautions

These products are FLAMMABLE AND CONTAIN HARMFUL VAPORS. Store containers away from heat, sparks, and open flame. Keep containers closed when not in use. Before using these products, read the Material Safety Data Sheet.

Use only with adequate ventilation. Avoid breathing of vapor or spray mist. Avoid contact with eyes and skin.

In case of skin contact, flush with plenty of water; for eyes, immediately flush with plenty of water for 15 min and get medical attention.

In case of fire, use water spray, foam, dry chemical, or CO₂. In case of spill, absorb and dispose of in accordance with local regulations.



**Table 1
Typical Properties**

Property	Acrylic Adhesives			Resin Solution
	68040	68070	68080	68065
Weight/Gallon, lb	7.30 ± 0.10	7.66 ± 0.10	7.65 ± 0.10	14.21
Solids by Weight, %	24–26	34–36	29–32	52 (Pigment) 28 (Epoxy)
Density at 25°C (77°F)	0.88	0.92	0.92	1.7
Viscosity, cPs Brookfield RTV #2 Spindle 40 rpm	150–450	340–650	400–1,300	—
Appearance	Water White* Viscous Liquid	Water White Viscous Liquid	Pale Straw Color	White
Suggested Reducing Solvent	Toluene	Aromatic Hydrocarbons	Aromatic Hydrocarbons	—
Coverage, ft ² /gal at 1 mil DFT	300	460	370	—
Suggested DFT, mil	0.3–0.6	0.2–0.6	0.2–0.4	—
Activation	Heat	Heat	Heat	—
Laminating Temp., °C (°F)	149–176 (300–350)			
Metal		198–210 (390–410)	198–210 (390–410)	—
Vinyl Films		149–176 (300–350)	149–176 (300–350)	—
Color Stability	Excellent	Excellent	Excellent	—
Closed Cup Flash Range, °C (°F)	–7–23 (20–73)	–7–23 (20–73)	–7–23 (20–73)	–7–23 (20–73)
Curing Agent**	Optional	Optional	N/A	N/A
Fineness, µm	—	—	—	7 max.
Epoxide Content Equivalent/100 g Sol	—	—	—	0.150

* Some vinyl films will cause slight yellowing of 68040.

** EPON 828 (Shell), DER 331 (Dow), or equivalent epoxy can be added to upgrade adhesion, chemical, and heat resistance. The suggested level of epoxy is 10% or less (based on solids). After addition of the epoxy, pot life will be at least 8 hr. Post-curing of the laminate for 1 to 2 hr at 93–149°C (200–300°F) will usually provide cure equal to that obtained by aging the laminate for 5 to 7 days at 25°C (77°F).

For more information on *Tedlar*[®] PVF films:

DuPont *Tedlar*[®]
P.O. Box 88
Sheridan Drive and River Road
Buffalo, NY 14207-0088

**(800) 255-8386
Fax: (716) 879-4545**

Note: We believe this information is the best currently available on the subject. It is offered as a possible helpful suggestion in experimentation you may care to undertake along these lines. It is subject to revision as additional knowledge and experience are gained. DuPont makes no guarantee of results and assumes no obligation or liability whatsoever in connection with this information. This publication is not license to operate under, or intended to suggest infringement, of any existing patents.

CAUTION: Do not use in medical applications involving permanent implantation in the human body. For other medical applications, see "DuPont Medical Caution Statement," H-50102.

