



Dureflex[®] A4700

Characterization

Dureflex A4700 is a self-priming, polyether based, low modulus aliphatic thermoplastic polyurethane film/sheet product.

Properties / Applications

Dureflex A4700 was developed as part of a series of optical grade adhesive films. Dureflex A4700 was specifically developed for the lamination of optically transparent glass-clad polycarbonate. Dureflex A4700 is also used in acrylic composites CAB and other compatible thermoplastics.

Dureflex A4700 can be supplied from 15 mils to 50 mils (.38 to 1.27 mm) with a specially developed film finish to allow for evacuation of trapped air during press or autoclave bonding. Dureflex A4700 is supplied with a protective polyethylene interleaf to prevent film-to-film roll blocking, and should be incorporated where a "primerless" lamination is required. As with any product, use of Dureflex A4700 in a given application must be tested (including but not limited to field testing) in advance by the user to determine suitability.

Typical Physical Properties*

	ASTM Test Method	Value
Specific Gravity	D-792	1.07
Durometer (Shore A)	D-2240	78
Ultimate Tensile Strength	D-882	5,500 psi
Ultimate Elongation	D-882	500%
100% Modulus (MD/CD Ave.)	D-882	500 psi
300% Modulus (MD/CD Ave.)	D-882	1,500 psi
Tear Resistance (MD/CD Ave.)	D-1004	250 pli
Min Softening Point (TMA Onset)	E2347	76°C / 169°F
Max Softening Point (TMA Endpoint)	E2347	100°C / 212°F
Approx. Yield (sq. ft./lb. @1 mil)		180
Appearance		Optically Clear

* These items are provided as general information only. They are approximate values and are not part of the product specifications.



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Custom Manufacturing Capabilities**

Self-Priming	Yes	All Grades
Film Finish Available	Yes	Matte/Emboss
Interleaf	Yes	Polyethylene
Gauges Availability	Yes	15 - 50 mil
Widths Availability	Yes	20 - 60 in
Clean Room Production	Yes	All Grades

***Restriction may apply to certain film grades.*

Potential Applications

- Prison containment glazing
- Retail kiosks
- Hurricane/Vandals glazing
- Zoos
- Computer screens
- Ballistic/Blast/Intrusion
- Vehicle armoring
- Residential glazing
- Government/Military
- Other

Other Information

Dureflex[®] is a registered trademark of Covestro.

Health and Safety Information

Appropriate literature has been assembled which provides information concerning the health and safety precautions that must be observed when handling this product. Before working with this product, you must read and become familiar with the available information on its risks, proper use, and handling. This cannot be overemphasized. Information is available in several forms, e.g., safety data sheets and product labels. For further information contact your Covestro LLC representative or the Product Safety and Regulatory Affairs Department in Pittsburgh, PA.



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The manner in which you use and the purpose to which you put and utilize our products, technical assistance and information (whether verbal, written or by way of production evaluations), including any suggested formulations and recommendations, are beyond our control. Therefore, it is imperative that you test our products, technical assistance and information to determine to your own satisfaction whether our products, technical assistance and information are suitable for your intended uses and applications. This application-specific analysis must at least include testing to determine suitability from a technical as well as health, safety, and environmental standpoint. Such testing has not necessarily been done by us. Unless we otherwise agree in writing, all products are sold strictly pursuant to the terms of our standard conditions of sale which are available upon request. All information and technical assistance is given without warranty or guarantee and is subject to change without notice. It is expressly understood and agreed that you assume and hereby expressly release us from all liability, in tort, contract or otherwise, incurred in connection with the use of our products, technical assistance, and information. Any statement or recommendation not contained herein is unauthorized and shall not bind us. Nothing herein shall be construed as a recommendation to use any product in conflict with any claim of any patent relative to any material or its use. No license is implied or in fact granted under the claims of any patent.

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Document contains important information and must be read in its entirety.

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 **Dureflex[®]**
Product Datasheet