

**\*\*COMPLETE THIS FORM TO INITIATE SUPPLIER SCOUTING\*\***  
**MEPNN Supplier Scouting Opportunity Synopsis**

\*The submitting organization (ex. MEP Center, requesting company, federal/state agency) agrees to notify NIST MEP of the status of actions taken as a result of this scouting instance within 30 days after receiving a results report. Notification should be via email to [scouting@nist.gov](mailto:scouting@nist.gov), indicating the following:

- Contact with matches identified in report complete and supply contract awarded, process complete
- Contact with matches identified in report complete and no supply contract awarded, process complete
- Contact with matches identified in report complete and supply negotiations underway, process in progress
- Contact with matches identified in report underway; supply negotiations not yet begun; process in progress
- Contact with matches identified in report not yet begun, process in progress
- Contact with matches identified in report will not occur within the next 6-months, process complete

Aliphatic Urethane

Item to be Scouted

30 days

Opportunities will be posted for 30 days unless specified

Please describe the item application/ the end use of item.\* Provide the item number if applicable: (N95 Mask vs Protective Mask).

Aliphatic urethane used in glass lamination.

2022-081

Supplier Scouting Number (NIST MEP use)

327210

Scouting customer/product [NAICS Code](#), if known

<b>TECHNICAL INFORMATION:</b>	<b>1. Supplier Information</b>	<b>a. Type of supplier being sought*</b>
		<input checked="" type="checkbox"/> Manufacturer <input type="checkbox"/> Contract Manufacturer <input checked="" type="checkbox"/> Distributor <input type="checkbox"/> Other _____
		<b>b. Reason for scouting submission*</b>
		<input type="checkbox"/> 2 <sup>nd</sup> Supplier <input type="checkbox"/> Price <input type="checkbox"/> Re-shore <input type="checkbox"/> Past supplier no longer available <input type="checkbox"/> New Product Startup <input checked="" type="checkbox"/> Other Shortage of product _____
	<b>2. Summary of Technical Specifications and Performance Requirements:</b>	<b>a. Describe the manufacturing processes (elaborate to provide as much detail as possible).*</b>
		Not something readily known by Patriot. Suppliers purchase resin and extrude the material with other necessary components in film form.
		<b>b. Provide dimensions / size / tolerances / performance specifications for the item.*</b>
		<b>.025 and .050 thicknesses in 50", 60", 80" rolls</b>
		<b>c. List required materials needed to make the product, including materials of product components.*</b>
		See attached material data sheet.

2. Summary of Technical Specifications and Performance Requirements cont:	<p>d. Are there applicable certification requirements?* <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Please explain</p>
	<p>Product needs to be certified by the manufacturer per their spec</p>
	<p>e. Are there applicable regulations?* <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Please explain</p>
	<p>f. Are there any other standards, requirements, etc.?* <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Please explain</p>
	<p>g. Additional Comments: Is there other information that would impact the item's performance or usefulness? Please explain.</p>
	<p>As long as the material was in line with the spec's for similar material company purchases now (i.e. Covestro A4700, SWM ST-6050, SWM HP-8000, Sierracin S-123, Huntsman PE-399)</p>
	BUSINESS INFORMATION:
<p>3a. Estimated potential business volume (i.e., # Units Per Day, Month, Year) *:</p>	
<p>Company uses nearly 100 rolls of aliphatic urethane per month.</p>	
<p>b. Estimated target price / unit cost information (if unavailable explain) *:</p>	
<p>Currently paying \$13 - \$14/lb</p>	
<p>4. Delivery Requirements:</p>	
<p>a. When is it needed by? (Immediate, 30 Days, 6 months, etc.)*</p>	
<p>Immediate</p>	
<p>b. Describe packaging requirements (i.e., individually/group packaging)*</p>	
<p>Rolls individually packaged on skids of 9 rolls per skid</p>	
<p>c. Where will this item be shipped? *</p>	
<p>Lenox Dale, MA and Fairfield, OH</p>	
<p>5. Additional Comments:</p>	
<p>Is there other information you would like to include?</p>	

Photos or diagrams of the item (helpful but not required).



# Dureflex<sup>®</sup> 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 to 50 mils (0.38 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, U.S. Units	Value, S.I. Units
Specific Gravity	D-792	1.07	1.07
Durometer (Shore A)	D-2240	78	78
Ultimate Tensile Strength	D-882	5,500 psi	37.9 MPa
Ultimate Elongation	D-882	500%	500%
100% Modulus (MD/CD Avg.)	D-882	500 psi	3.4 MPa
300% Modulus (MD/CD Avg.)	D-882	1,500 psi	10.3 MPa
Tear Resistance (MD/CD Avg.)	D-1004	250 pli	43.8 kN/m
Min Softening Point (TMA Onset)	E-2347	169°F	76°C
Max Softening Point (TMA Endpoint)	E-2347	212°F	100°C
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.

## Custom Manufacturing Capabilities\*\*

	Range of Capabilities, U.S. Units	Range of Capabilities, S.I. Units
Self-Priming	All Grades	All Grades
Film Finish Available	Matte/Emboss	Matte/Emboss
Interleaf	Polyethylene	Polyethylene
Gauges Availability	15 to 50 mil	380 to 1270 µm
Widths Availability	20 to 60 in.	510 to 1520 mm
Clean Room Production	All Grades	All Grades

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



# Dureflex<sup>®</sup> A4700

## Potential Applications

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

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## Other Information

Dureflex<sup>®</sup> is a registered trademark of Covestro.

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## 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.

Edition 2021-03-16

 **Dureflex<sup>®</sup>**  
Product Datasheet