



# DUREFLEX® PT9700

*Aromatic Polyether Polyurethane Film*  
**Non-Halogenated/Fire Retardant**

## Product Information

Dureflex® PT9700 is a clear, halogen-free, flame retardant, aromatic polyether polyurethane film/sheet product. As a polyether TPU, it exhibits excellent hydrolysis and fungus resistance, and therefore is recommended for applications that have continuous exposure to water and high humidity environments. This product contains a non-halogenated flame retardant and has a “V-0” rating in accordance with the UL-94 vertical flame test (at a thickness of 0.9 mm and less). If your application will experience continuous exposure to petrochemicals such as gasoline, diesel fuel, aviation fuel, and many solvents, consider using Dureflex® brand polyester polyurethane film and sheet products. As with any product, use of Dureflex® PT9700 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\*

	<b>ASTM Test Method</b>	<b>Value</b>
Specific Gravity	D-792	1.14
Durometer (Shore A)	D-2240	75
Ultimate Tensile Strength	D-882	8000 psi
Ultimate Elongation	D-882	750%
100% Modulus (MD/CD Ave.)	D-882	650 psi
300% Modulus (MD/CD Ave.)	D-882	1200 psi
Tear Resistance (MD/CD Ave.)	D-1004	300 pli
Min Softening Point	TMA onset	143°C / 289°F
Max Softening Point	TMA endpoint	153°C / 307°F
Approx. Yield (sq. ft./lb. @1 mil)		169

## Advantages

What makes Dureflex® brand polyurethane film grades attractive:

- functional flame retardance
- high moisture vapor transmission rates
- rubber-like elasticity
- functional static dissipation
- exceptional structural memory
- good gas / vapor barrier properties
- wide ranging surface textures / slip features
- matched customer colors
- full range of opacity

Secondary Processing Options:

- foam-in-place
- heat sealing
- laminating
- match mold forming
- pressure forming
- RF welding / sealing
- solvent welding
- thermoforming
- ultrasonic welding
- vacuum forming

\*Refers generally to Dureflex® brand films and not solely to the product described on this data sheet.

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

## Custom Manufacturing Capabilities<sup>2</sup>

	Flat Die Sheeting	Blown Film
Width Available	10 - 56 in. <sup>2</sup>	12 - 75 in. <sup>2</sup>
Gauge Available	15 - 30 mils	5- 12 mils
Surface Texturing Available	Yes	No
Interleaf Available	Yes	Yes <sup>2</sup>
Clean Room Production	Yes	No
Core Size available	3 in & 6 in	3 in & 6 in

<sup>2</sup> Restriction may apply to certain film grades.

### Colors

- natural - standard
- black and colors available at additional cost

Degree of slip, tack, gloss, and opacity can be modified to customers needs/specifications.

### Health and Safety Information

Appropriate literature has been assembled which provides information concerning the health and safety precautions that must be observed when handling Dureflex® PT9700. 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., material safety data sheets and product labels. For further information contact your Bayer MaterialScience representative or the Product Safety and Regulatory Affairs Department in Pittsburgh, PA.

Note: The information contained in this bulletin is current as of July 2010, please contact Bayer MaterialScience to determine whether this publication has been revised.

### Bayer MaterialScience LLC

8 Fairview Way • South Deerfield, MA 01373 • Phone: 800-644-0116 • [www.bayerfilms.com](http://www.bayerfilms.com)

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