



# DUREFLEX® PT9500

## *Aromatic Polyether Polyurethane Film*

### Product Information

The Dureflex® PT9500 Series is a family of aromatic polyether polyurethane film/sheet products which exhibit excellent hydrolysis and fungus resistance, and therefore are recommended for applications that have continuous exposure to water and high humidity environments. These products are recommended for adhesion to fabrics as a protective and adhesive layer, or as “stand alone” films in demanding elastic applications. With its relatively low durometer and melt range, this product is ideally suited for lamination to temperature-sensitive substrates and/or applications which require a soft hand and/or low modulus. 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 grades. As with any product, use of Dureflex® PT9500 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	1.12
Durometer (Shore A)	D-2240	80
Ultimate Tensile Strength	D-882	8900 psi
Ultimate Elongation	D-882	700%
100% Modulus (MD/CD Ave.)	D-882	850 psi
300% Modulus (MD/CD Ave.)	D-882	1600 psi
Tear Resistance (MD/CD Ave.)	D-1004	450 pli
Min Softening Point (TMA onset)	E2347-04	133°C / 271°F
Max Softening Point (TMA endpoint)	E2347-04	153°C / 307°F
Approx. Yield (sq. ft./lb. @1 mil)		172

### 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

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

### 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.

### 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® PT9500. 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.

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

Range of Capabilities	
Width Available	10 - 80 in. <sup>2</sup>
Gauge Available	1 - 60 mils
Surface Texturing Available	Yes
Interleaf Available	Yes <sup>2</sup>
Clean Room Production	Yes
Core Size available	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 customer's needs/specifications.

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

### Bayer MaterialScience LLC

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