



# BAYFOL® UV 1 7-2 000000

## *Polycarbonate Film*

### **Description and Application**

Bayfol UV 1 7-2 000000 is an enhanced extrusion lamination film based on Makrolon® polycarbonate. This film, which is virtually glare-free and has excellent scratch resistance, has been developed especially for critical graphic applications to provide UV resistance. Typical applications are gas pump graphics, harsh exterior environments, nameplates and labels.

Bayfol UV 1 7-2 000000 is available in various standard thicknesses from 0.007" to 0.030" (175 microns to 750 microns). Other thicknesses are available on request. The surface combination of Bayfol UV 1 7-2 000000 is one side velvet and one side very fine matte. As with any product, use of Bayfol UV 1 7-2 000000 in a given application must be tested (including but not limited to field testing) in advance by the user to determine suitability.

### **Health And Safety Information**

Appropriate literature has been assembled which provides information concerning the health and safety precautions that must be observed when handling Bayfol UV 1 7-2 000000. Before working with these products, you must read and become familiar with the available information on their hazards, proper use, and handling. This cannot be overemphasized. Information is available in several forms, e.g., material safety data sheets and product labels. Consult your local Bayer MaterialScience representative or contact Bayer's Product Safety and Regulatory Affairs Department in Pittsburgh, PA.

## Typical Properties\*

Property	Test Method	Unit	Value
<b>General</b>			
Specific Gravity	ASTM D 792		1.21
Conversion Factor		ft <sup>2</sup> /lb·mil   m <sup>2</sup> /kg·mm	159   0.826
Gloss 60° top side, black inked second surface	ASTM D 2457	gloss unit	4 to 9
Surface			velvet/v.f.matte
<b>Mechanical</b>			
Tensile Strength, Yield	ASTM D 882	psi	7,500
Tensile Strength, Break	ASTM D 882	psi	7,400
Elongation at Break	ASTM D 882	%	110
Tear Strength, Initiation	ASTM D 1004	lb/in	1,100
<b>UV Resistance</b>			
Xenon Arc.	SAE J 1960	yellowness index	
300 hr.			1.0
600 hr.			1.5
800 hr.			1.6
1000 hr.			1.9
Auto Exterior, 3000 hr.	SAE J 2527 C2	Δ E	< 1.0
<b>Flammability</b>			
Burning Rate (FMVSS 302)	ISO 3795	mm/min	--
UL Listing	UL 94 V-0	min. thickness	--
UL Listing	UL 94 V-2	min. thickness	--
UL Listing	UL 94 VTM-0	min. thickness	--
UL Listing	UL 94 VTM-2	min. thickness	--
<b>Optical</b>			
Haze	ASTM D 1003	%	> 0.9
Light Transmittance	ASTM D 1003	%	> 70 (> 20 mil) > 80 (< 20 mil)
Yellowness Index	ASTM E 313		1
<b>Other</b>			
Water Absorption (saturation)	ISO 62	%	--
Water Absorption (immersion at 73°F/24h)	ASTM D 570	%	0.40
<b>Chemical Resistance**</b>			
Surface Contact @ 73°F for 1 hour			
Methylene Chloride			Fail
Acetone			Fail
Ethyl Acetate			Fail
Xylene			Fail
Isopropanol			Fail
Toluene			Fail
40% NaOH			Pass
Concentrated HCl			Pass
Butyl Cellosolve			Fail
Premium Gasoline, unleaded			Pass
Formula 409®			Pass
Windex® with Ammonia-D®			Pass
Surface Contact @ 120°F for 24 hours			
Mustard			Fail
Formula 409®			Pass
Windex® with Ammonia-D®			Pass

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

\*\* Failure includes permanent stain, blistering, delamination or cracking.

Note: The information contained in this bulletin is current as of December 2011, please contact Bayer MaterialScience to determine whether this publication has been revised.

## Bayer MaterialScience LLC

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