

Autoflex

MacDermid
Autotype
A Platform Specialty Products company



Autoflex PC Product Data Sheet

Hardcoated polycarbonate film

Autoflex PC is a high quality, hardcoated polycarbonate film, consisting of a base polycarbonate and a texturable, chemically bonded UV-cured hard surface coating in gloss or antiglare finish.

Autoflex PC is available in sheets and rolls.

Autoflex PC Finish	Gauge			
	180µm	250µm	380µm	480µm
Gloss	G180L	G250L	G380 2L†	G480L G480 2L†
Antiglare	A180L	A250L	A380L	A480L A480 2L†

† Some grades are available as a special order with a second laminate on the hard coat surface.

Laminate:

Polycarbonate films with high gloss surfaces are prone to blocking when stored with the film surfaces touching each other. Blocking is the term given when two surfaces adhere or merge into each other and when separated leave permanent marks on the film. For this reason, MacDermid supplies the Autoflex PC film range with a protective laminate on the print surface and recommend that the laminate remains in place until the first print pass.

Textures:

Autoflex PC can be screen printed with Fototex to obtain selective textures (see Fototex data sheet).

Typical Properties		
Property	Autoflex PC	Test Method
Haze ¹	Gloss Antiglare <0.3% 9% ±2%	ASTM D1003
Total luminous transmission ¹	92% ±2%	ASTM D1003
Gloss level (60°) ¹	Gloss Antiglare 93 ±2 55 ±2	ASTM D2457
Yellowness index ¹	<2	ASTM E313
Taber abrasion ¹	Gloss Antiglare <5% haze N/A	ASTM D1044-82 100 cycles, 500g load CS10F wheels
Pencil hardness ²	Typically HB	JIS K5600 Mitsubishi pencils
Tensile strength ³	≥60 N/mm ²	ASTM D882-83/ISO 527
Breakdown voltage ³	250 µm 68 kV/mm	ASTM D149
Dimensional stability ¹	<0.2% at 135°C MD Max shrinkage	MacDermid method
Thicknesses	Nominal ± 10%	
Humidity testing	60°C / 95% RH for 1 week No visible change	MacDermid method
Thermal testing	4 Weeks at 50°C No visible change	MacDermid method
Chemical Resistance	Alcohols Dilute acids Dilute alkalis Esters Hydrocarbons Ketones Most household cleaning agents. Some aggressive solvents may leave small coating blisters	DIN 42 115 Please see Autoflex PC Solvent Resistance chart

¹ Test method adapted to MacDermid Method

² For more information, please refer to MacDermid statement on pencil hardness testing

³ Data derived from base film manufacturer's literature. The coating slightly enhances most properties

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