

XTRAFORM® 2D

Formable Hardcoat Polycarbonate Film

PRODUCT DESCRIPTION

XtraForm 2D is a hardcoated polycarbonate film designed to allow shallow forming whilst retaining its abrasion resistant properties.

XtraForm 2D has a chemically bonded, UV cured hard surface coating in a gloss or antiglare finish.



READ ENTIRE TECHNICAL DATA SHEET BEFORE USING THIS PRODUCT

PRODUCT RANGE

Product	Finish	180µm	250µm	380µm	480µm
XtraForm 2D	Gloss	G180L G180 2L	G250L G250 2L	G380L G380 2L	G480L G480 2L
	Antiglare	A180L	A250L	A380L	A480L

Key: L = Laminated on print side
 2L = 2 sides laminated

TYPICAL PROPERTIES

Property	Typical Value	Test Method ¹
Thickness	Nominal ± 10%	Test Method 096
Haze		
Gloss	< 0.3%	ASTM D1003
Antiglare	10.8% ± 3%	
Gloss Level (60°)		ASTM D2457(Modified to Test Method 022)
Gloss	93 ± 2	
Antiglare	50 ± 5	
Total Luminous Transmission	92% ± 2%	ASTM D1003
Yellowness Index	< 2	ASTM E313
Taber Abrasion	Change in % haze	Test Method 103
Gloss	< 5%	
Antiglare	N/A	
Humidity Test	60 °C / 95% RH for 7 days No visible change	Test Method 012
Thermal Test	4 weeks at 50 °C No visible change	Test Method 012
Chemical Resistance	Good resistance to many common industrial chemicals and household cleaning agents	DIN 42 115

Note: All evaluation results are obtained from lab produced samples at MacDermid Alpha Electronics Solutions. They are for general guidance only and do not represent the final product's properties.

¹ For details of the test method, please contact MacDermid Alpha Electronics Solutions

BASE FILM DATA²

Property	Data	Test Method
Tensile Strength	≥ 60 N / mm ²	ASTM D882-83/ISO 527
Relative Density	1.2	ASTM D1505-85

²Derived from suppliers' literature. The coating slightly enhances most properties

LAMINATE

Where present, the protective laminate on the print surface should be left in place until the first ink print pass.

The laminate on the print side is clearer than the one on the hardcoated side. The hardcoat laminate is hazy in appearance.

SHELF LIFE & STORAGE CONDITIONS

The recommended shelf life is 36 months from the date of manufacture. MacDermid Alpha Electronics Solutions guarantees a minimum remaining shelf life of 8 weeks at the time of despatch.

The recommended shelf life represents the maximum processing lifetime of the product from the date of manufacture when stored correctly and in unopened packaging.

The following storage conditions are recommended:

Storage Conditions	
Temperature	15 to 25 °C
Relative Humidity	< 55%
Packaging	Store in original protective packaging Once the packaging has been opened, the processing lifetime can be compromised due to air ingress, contamination, or UV light
Moisture	Store away from water sources
Chemicals	Keep away from aggressive solvents
Stacking	For material $\leq 250 \mu\text{m}$ thick, 100 sheet packs should be stacked no more than 10 packs high

IMDS ID-No

By arrangement with our regulatory affairs team.

SAFETY & WARNING

It is recommended that the company/operator read and review the Safety Data Sheets for the appropriate health and safety warnings before use.

Safety Data Sheets are available.

WASTE TREATMENT

Prior to using any recommendations or suggestions for waste treatment, the user is required to know the appropriate local/state/federal regulations for on-site or off-site treatment which may require permits. If there is any conflict regarding our recommendations, local/state/federal regulations take precedent.

CONTACT INFORMATION

**To confirm this document is the most recent version, please contact
techinfo@MacDermidAlpha.com**

www.macdermidalpha.com

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Also read carefully warning and safety information on the Safety Data Sheet. This data sheet contains technical information required for safe and economical operation of this product. READ IT THOROUGHLY PRIOR TO PRODUCT USE . Emergency safety directory assistance: US 1 202 464 2554, Europe + 44 1235 239 670, Asia + 65 3158 1074, Brazil 0800 707 7022 and 0800 172 020, Mexico 01800 002 1400 and (55) 5559 1588

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