



# PRIME HDPE 2000

PRIME 2000 is a High Density Polyethylene thermoplastic sheet designed for automotive, leisure, transportation and general thermoforming applications. PRIME 2000 has a high impact resistance across a wide temperature range, good ESCR characteristics & excellent chemical resistance. (Chemical resistance data is available on request).

	Property	Unit	ISO	Value
<b>PHYSICAL</b>				
Density (Natural)		g/cc	1183	.97
Melt Flow (190°C/5kg)		g/10min	118	0.4-0.5
<b>MECHANICAL</b>				
Izod Impact, notched	kJ/m <sup>2</sup>	23°C	180/A	17
		-30°C	180/A	16
Stress @ yield	MPa	50mm/min	527/2	26
Stress @ break	MPa	50mm/min	527/2	30
Strain @ yield	%	50mm/min	527/2	>1000
Flexular Modulus	MPa		178	1200
Shore D surface hardness			868	62

### THERMAL

VST @ 10N (VST/A)	°C	306	127
HDT@0.45 MPa (HDT/B)	°C	75	81

### FLAMABILITY RATING

Horizontal burn	1.5mm	UL94	HB
	3mm	UL94	HB
Typical forming temp	°C		140-180

## Finishing

Aluminium tool construction is recommended with a temperature control function to ensure consistent moulding & finished part dimensional tolerances. A constant tool temperature (Typically 70-80°C for PRIME 2000) should be maintained throughout the production run. Cooling using air or water spray will speed up the cooling cycle to provide efficient production output. Once removed from the tool, it is recommended that the component is clamped in a frame for a short period to optimise dimensional stability & reduce the risk of warping. Shrinkage rates are available on application

## Colour, Textures, Capabilities

PRIME 2000 is available in a full range of colours (subject to minimum order quantities) either colour matched to specific colour references, or to customer sample. A range of more standard colours is available for non-specific requirements. For outdoor use, PRIME 2000 can be stabilised against UV degradation. PRIME 2000 is available with a smooth or with a textured finish. Emboss swatches are available on request.

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