PLACI ACRILICE

PANOURI COMPOZITE DIN ALUMINIU

FOLII ADEZIVE

TABLA SI PROFIL AL

ILUMINARE CU LEDURI

ACCESORII

SPIROPLASTIC
MATERIALE PENTRU INDUSTRIA PUBLICITARA

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CLUJ
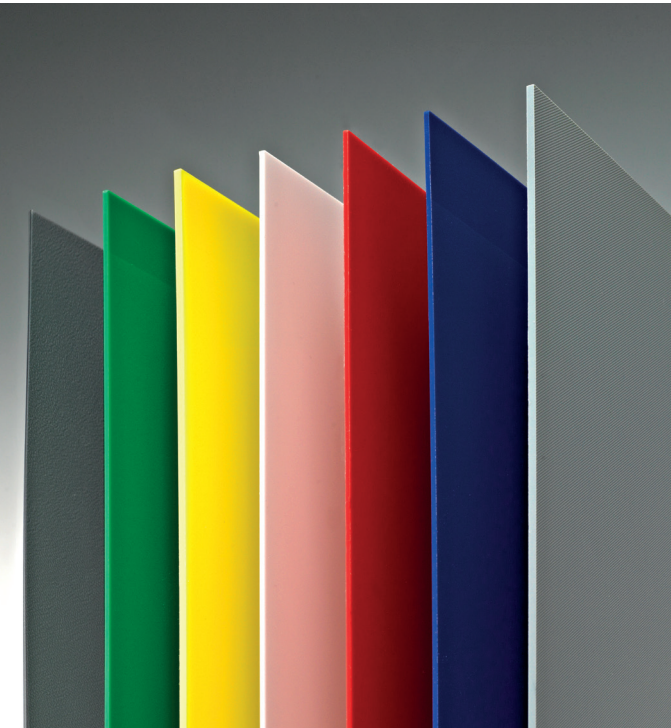Str. Orastiei nr. 10, Depozit nr. 2
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HIPS IS PERFECT FOR VACUUM FORMERS AND SCREEN PRINTERS WHO NEED TO TURN OUT HIGH QUALITY WORK ON A BUDGET.

It's also ideal for Point Of Sale producers wanting an 'easy print' surface in a range of colours, and great for demanding applications such as refrigerator liners, where a clean, bright appearance and food contact approval are vital.

All in all, **HIPS** offers guaranteed trouble-free processing, enhanced impact resistance, and, last but not least, enormous cost-efficiency.

CHARACTERISTICS

- Superior surface quality.
- Excellent low temperature impact performance.
- Suitable for thermoforming.
- Smooth surface with a choice of finish: matt or glossy.
- Excellent for printing.
- Outstanding electrical insulation properties.
- Food contact approved – non UV version.
- Meets fire safety standard - UL standard 94HB.

APPLICATIONS

- Refrigerator liners.
- Sanitary ware.
- Bath panels.
- Shower wall panels.
- Vacuum formed parts.
- Screen printing substrate.
- Point Of Sale display units.
- Mobile home and caravan fittings.

PRODUCT IDENTIFICATION

Polycasa® HIPS is a rubber modified polystyrene sheet that has improved impact strength and is easy to mould and cut to size.

The product is available with either a matt finish on both sides or a matt finish on one side, and glossy surface on the other. The standard colour is white, but a range of other colours is available, in addition to colour-matching to order.

We can also deliver sheet for special applications. These include, but are not limited to:

- UV treatment: improved colour stability and impact resistance.
- Environmental Stress Cracking Resistance (ESCR).
- Freon resistant grades for the refrigeration industry.
- Corona treatment: process to increase surface tension.

PRODUCT RANGE

- Available with textured surface and a range of colours, subject to minimum order quantities.
- Patterns: smart and pinseal, leather and grain.
- Colours: white, opal white, yellow, red, green, blue, grey, black and silver, additional colours available on request.
- Sanitary colours: sanitary white, star white, pergamon and manhattan.
- The standard range of thickness is from 0.5 – 10.0 mm.

Please contact your local customer service centre for a complete product overview. For details see back of brochure.

TECHNICAL INFORMATION

GENERAL

Property	Method	Unit	HIPS Glossy / Matt	HIPS Matt / Matt
Density	ISO 1183	g/cm^3	1.05	1.05
Burning resistance	UL standard 94		94 HB	94 HB

MECHANICAL

Property	Method	Unit	HIPS Glossy / Matt	HIPS Matt / Matt
Flexural modulus	ISO 178	MPa	1850	1800
Flexural strength	SO 178	MPa	34	32
Tensile modulus	ISO 527-2	MPa	1730	1670
Tensile strength	ISO 527-2	MPa	24	20
Elongation at break	ISO 527-2	%	2.9	42
Stress at break	ISO 527-2	MPa	18	16
Ball indentation hardness	ISO 2039-1	N/mm^2	80	80

THERMAL

Property	Method	Unit	HIPS Glossy / Matt	HIPS Matt / Matt
Vicat temperature (B 50)	ISO 306	°C	92	91
Heat defection temperature (A)	ISO 75-2	°C	82	84
Linear thermal expansion	DIN 53752	K^{-1}x10^{-5}	8	8
Service temperature continuous use	DIN 52612*	°C	70	70
Thermal conductivity	ISO 11501*	W/mK	0.16	0.16
Dimensional change on heating (4mm)	ISO 15015	%	5	5.5

ELECTRICAL (raw material specification)

Property	Method	Unit	HIPS Glossy / Matt	HIPS Matt / Matt
Volume resistivity	IEC 93	Ω.cm	>10^{16}	>10^{16}
Surface resistivity	ICE 93	Ω	>10^{13}	>10^{13}
Dielectrical strength	IEC 243-1	KV/mm	155	155
Dielectrical constant at 100Hz- 1 MHz	IEC 250		2.5	2.5
Dissipation factor at 100Hz- 1 MHz	IEC 250		>10^{-4}	>10^{-4}

IMPACT STRENGTHS

Property	Method	Unit	HIPS Glossy / Matt	HIPS Matt / Matt
Charpy notched glossy side impacted	ISO 179-1/1fA	KJ/m^2	9	-
Charpy notched matt side impacted	ISO 179-1/1fA	KJ/m^2	6	10

Note: all mentioned data is based on extruded sheets in a thickness of 4 mm.
These technical data of our products are typical ones; the actually measured values are subject to production variations.