

**PRIME-EX X2 GEOS Indigo** is a stiff polypropylene sheet optimized to provide excellent adhesion of **HP Indigo ElectroInks®** it is specially formulated to replace HIPS or PVC

Primer applied on both sides	
Surface finish	Very fine matt surface on both sides
Thickness $\mu\text{m}$	300-450
Thickness tolerance $\mu\text{m}$	+10-20
Size short grain	450 X 320 $\pm$ 1 mm (any other size or rolls, on request)
Angular tolerance 90°	90 $\pm$ 0.2°

Colors	White 0060A 0067A	Opacity	Min 97%
Specific Gravity	1.08		
Coefficient of thermal expansion	0.6*10 <sup>-4</sup> /K 5-80°C	0.6 mm for each meter for change of 10°C	

Property	Method	Unit	Value
Tensile Strength at Yield	ISO 527-2	MPa	35
Elongation at Yield	ISO 527-2	%	9
Tensile modulus	ISO 527-2	MPa	1900
Flexural modulus	ISO 178	MPa	1950
Izod Impact Strength (notched)at 23°C	ISO 180	kJ/m <sup>2</sup>	5
Charpy Impact Strength (notched)at 23°C	ISO 179	kJ/m <sup>2</sup>	9
Melting Point	ISO 3146	°C	165°C
Vicat Softening Point	ISO 306	50N-50°C per hour	85 °C
		10N-50°C per hour	150 °C
Heat Deflection Temperature	ISO 752	1.80 MPa-120°C per hour	58 °C
		0.45 MPa - 120°C per hour	100 °C
Hardness Rockwell - R-scale	ISO 2039-2		96
Tear	ASTM D1004	N/mm	>200
Tear—Simulation of cord	Internal EXTEN	N/mm (HIPS 50-100N)	>400

**Cold break:** GEOS Indigo is rigid and brittle in freeze temperature. Take care when selecting application.

**Printing:** Sheets are suitable for HP Indigo industrial press (one shot). With commercial (multi shot) some registration problems can accrue due to thermal expansion of PP. It is recommended to protect printing with Over Print Varnish

**Cutting and creasing:** Acclimate the sheets to room temperature before converting (also in the core of the pallet). For label production use cannon press and drill. Cutting on flat bed requires high pressure due to the high hardness of the sheet. Sharp tools are essential in order to avoid brakes and cracks. The sheet is brittle in cold temperature so when cutting make sure that the sheet is not too cold.

**Foil blocking:** use zinc or brass stamp. Select foils suitable for plastics and for the required print resolution. Preliminary test of the foil must be taken

**Welding:** **GEOS Indigo** cannot be welded with hot air or plate.

**Conformity:**

Norm	EN71/3 toy and safety standard	Food European Directive 10/2011 and amendments*	RoHS Directive 02/95/EC	Heavy metals Directive 94/62/EC
<b>PRIME-EX GEOS INDIGO</b>	Yes	Yes	Yes	Yes

\*Food contact conformity should be requested prior to placement of an order. Exten will not provide conformity declaration for articles already produced without particular notice from the client.

**Storage:** store in dry and shaded place. Do not store at temperature higher than 30°C printability deteriorates.

**Recycling:** Production rejects and waste should preferably be recycled instead of being disposed. The sheets are degradable by UV light and combustion. Sheets are not biodegradable.

No harmful emission when burned, just H<sub>2</sub>O and CO<sub>2</sub>  
 No heavy metals, phthalates, plasticizers