

PRIME-EX ECOCARD Is Polypropylene sheet specially formulated for UV offset printed cards.

Main applications are simple cards without lamination, snap off cards, hotel key cards and promotion cards.

Main advantage: Low specific gravity. Ecologic (low carbon-footprint)

Embossing *	Top: Gloss	Bottom: Satin or Gloss	
Primer coating	Both sides primed	Primer on Satin	Primer on Gloss
Thickness μm	400-800		
Thickness tolerance μm	+10-30		
Size and Angular tolerance	See Figure 1		

* Sides can be reversed on request.

Specific Gravity	Gr/Cm ³	1.03
Coefficient of thermal expansion	10 ⁻⁴ /K 5-80°C	1 mm for each meter for change of 10°C

Property	Method	Unit	Value
Tensile Strength at Yield	ISO 527-2	MPa	36
Elongation at Yield	ISO 527-2	%	9
Tensile modulus	ISO 527-2	MPa	2400
Flexural modulus	ISO 178	MPa	2300
Heat deflection temperature B (0.45 MPa)	ISO 75B-1, -2		110 °C
Vicat softening temperature A/50	ISO 306		155 °C
Charpy unnotched impact strength 23°C	ISO 179	kJ/m ²	120
Charpy Impact Strength (notched)at 0°C	ISO 179	kJ/m ²	50
Hardness Rockwell - R-scale	ISO 2039-1		85

Fragility in cold environment: PRIME-EX ECOCARD is rigid and brittle in low temperature, recommended converting temperature >23°C.

PRIME-EX ECOCARD cannot replace PRIME-EX TAG or other standard PP used for items requiring high impact also in cold conditions.

Surface: Please state which side to be on top. EX-P will produce according to client's request.

The Satin side is primed with special chemical resistant primer. This enables exceptional ink adhesion, scratch resistance and chemical resistance, to the final printed article.

The satin surface becomes very glossy after varnishing (with low "orange peel" effect)

Printability on primer guaranteed for one year after production.

The uncoated side is corona treated for screen and offset printing. The treatment is guaranteed for 6 month for screen printing, and offset printing.

Check production date before printing!

Inks: Always check carefully if ink is suitable to the job and process.

Cutting and creasing: Acclimate the sheets to room temperature before converting (also in the core of the pallet). For card and label production use cannon press (annular die) 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 PP and for the required print resolution.

Magnetic strip: can be laminated with magnetic strip. It is important to select a strip that preforms correctly, not all strips are suitable.

Thermal transfer printing: it is possible to print directly on the card with suitable ribbons. If the card is varnished printability depends on the varnish type and ribbon. (Consult printer maker for suitable ribbons. In general ribbons for non PVC are suitable)

Ink jet printing: UV inkjet adheres well to the sheet surface. If the card is printed and varnished the inkjet printability depends on the varnish below it.

Lamination: Can be hot or cold laminated with adhesive film.

Welding: PRIME-EX ECOCARD cannot be welded on the primed side only uncoated face is weldabel.

Bonding: Use hot melt PUR on automatic gluing lines. Carefully select glue and gluing conditions. Preliminary test must be taken if the glue is applied on the coated side.

Conformity: is not suitable for plastic materials and articles intended to come into contact with food due to the coating.

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
PRIME-EX ECOCARD	Yes	No	Yes	Yes

Storage: store in dry and shaded place. Do not store at temperature higher than 35°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.

Figure 1

