



Axipack, a leading European producer of extruded polypropylene sheets and reels, offers its extensive range of ViPrint suitable for graphic arts and industrial applications.

## The Pure Glass Collections



Transparent PP Collections, of **lower density than PET and PVC**. This light, flexible, solid and transparent material is ideal for applications such as:

- Promotional cases,
- Luxury packaging,
- Advertising items,
- Small POS,
- Stationery items,
- Notebook Covers,
- Healthcare cough and sneeze Visors.

Transparent PP sheets, declined in 100% virgin and 30% PIR. Available from production MOQ **500 kg, 0.30 mm to 1.00 mm**.

Product	ViPrint CREA	ViPrint ECO	Finish
Pure Glass	x	30% PIR	smooth/smooth
Pure Glass+	x	-	smooth/smooth
Pure Glass <b>Ultimate</b>	x	-	smooth/smooth
Pure Glass Satin	x	30% PIR	smooth/satin

- **Pure Glass Ultimate** is the quality with the **best transparency** in our range. Also available from **Stock Service** in 0.80 mm, in 80 x 120 cm sheet size.
- **Pure Glass+** has an **improved transparency** over our standard range.
- **Pure Glass** is the **standard** and essential range. It's proposed with 100% virgin PP (CREA) or with 30% PIR (ECO). Also available from **Stock Service** in 0.50 mm, in 80 x 120 cm sheet size.
- **Pure Glass Satin** is proposed with 100% virgin PP (CREA) or Satin ECO30 with 30% PIR (ECO). Its Satin finish offers less blocking while retaining good transparency.

All of our Pure Glass products have double-sided corona treatment allowing ViPrint to be printed using **UV offset printing, traditional UV screen printing, UV digital printing**.

For gluing applications in particular, it is recommended to use specific PUR (polyurethane) adhesives.

Unlike PVC, ViPrint gives off no chlorine gasses if burnt it is an ecological and 100% recyclable PP sheet.



pure glass

pure glass+

pure glass  
**Ultimate**





pure glass  
Satin



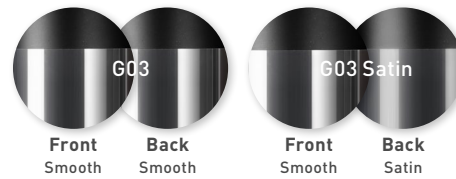
### ViPrint is...

- ▶ ... An innovative range offering outstanding characteristics, exceptional finishes, flexible, tough, durable, lightweight, strong, resistant to water and many chemicals, rigid, flexible and recyclable,
- ▶ ... An attractive material which can be folded, creased, cut, welded, riveted, perforated, glued, printed, sewn or embossed,
- ▶ ... A huge choice of products for small or large production runs, innovative designs and multiple applications.

## Colour range

"Pure Glass Ultimate" range	
	Transparent 0007
"Pure Glass+" range	
	Transparent 0004
"Pure Glass" range	
	Transparent 0009
"Pure Glass Satin" range	
	Transparent 0006

## Surface Embossing



## Dimensions (mm)

	Thicknesses	Width	Length
G03	≥ 0.30	550 to 800	700 to 1,200
	0.35 – 0.40	550 to 1,100	700 to 1,400
	0.40 – 1.00	500 to 1,200	700 to 1,400

XXS and XXL sheets: consult us

## Thickness (µm) - Density



Thickness	Density
300 – 400	0.93
≥ 410	0.92

## Minimum order quantity


	Standard size	XXL size
MOQ (kg)	500	-
Campaign Min. (kg)	500	-

## Services

> ViPrint Pure Glass 0.50 mm and Pure Glass Ultimate 0.80 mm are available from stock service, shipped within 24 hours from day of order:

Direct line:  +33 (0)3 21 61 66 65 -  [stock.service@axipack.fr](mailto:stock.service@axipack.fr)

Product	Colour		Thickness (mm)	Size (mm)	Packaging	
					Packet wrapped	Sheets palletised
Pure Glass		Transparent 0009	0.50	800 x 1,200	x	
Pure Glass Ultimate		Transparent 0007	0.80	800 x 1,200	x	

 +33 (0)3 21 61 66 66 - ask for the customer service

## 1. General characteristics of the product – Environment

### CREA

- Sheet consisting mainly of polypropylene, polyethylene, antistatic agent, and colourant
- Recyclable sheet, the composition of which complies with the REACH regulations
- 2-sided corona treated, suitable for UV offset printing, UV screen printing and UV digital printing
- Halogen-free, ozone-free, phthalate-free

### ECO

- Sheet made from post-industrial recycled material and virgin (polypropylene, polyethylene and antistatic agent, and colourant formulation)
- ViPrint **ECO** ranges are recyclable
- Pure Glass ECO30 & Pure Glass Satin ECO30 ranges: 30% recycled post-industrial and 70% virgin material
- 2-sided corona treated, suitable for UV offset printing, UV screen printing and UV digital printing

## 2. Surface aspects & minimum manufacturing quantities

Embossing	G03*	G03 Satin
Front	Smooth	Smooth
Back	Smooth	Satin

\*Both sides of the sheet are sensitive to scratching. In order to limit the risk of scratching it is recommended to handle the sheets carefully and protect the edges of the machines during the processing.

	MOQ* (kg)	Campaign* (kg)
Standard size	500	500

\*Per thickness / sheet size / colour

## 3. Dimension Tolerances

### 3.1. Extrusion

a/ Available sheet sizes

Thickness (µm)	300	> 300	> 400	1,000
Width (mm)	550 - 800	550 - 1,100	500 - 1,200	
Length (mm)	700 - 1,200	700 - 1,400	700 - 1,400	

b/ Dimensional tolerances

	Unit	Min	Max
Thickness	µm	-20	+20
Width	mm	0	+5
Length	mm	0	+5
90° Angle	mm	0	+3
Sheet flatness (front/back)	mm	0	+5
Flatness accross sheet	mm	0	+5

Tolerances are given in relation to the nominal ordered sheet size.

The following tolerances are given under normal conditions of use (around 20°C).

When subjected to temperature, ViPrint (like all thermoplastics) can see these tolerances become larger (expansion phenomenon).

## 4. Mechanical properties

Properties	Method	Unit	Value
Specific weight			
Thickness ≤ 0.400 mm		g/cm <sup>3</sup>	0.93
Thickness ≥ 0.410 mm			0.92
Tensile strength (Youngs Modulus)	ISO 527-2	Mpa	ND
Tensile strength	ISO 527-2	Mpa	ND
Elasticity	ISO 527-2	%	ND
Impact strength Izod	ISO 180	kJ/m <sup>2</sup>	ND
Surface tension both sides	-	dynes	46 <sup>(1)</sup>
Coefficient of thermal expansion	-	K <sup>-1</sup>	1.5 10 <sup>-4</sup>

Value relates to material in 500 µm. <sup>(1)</sup>At the time of manufacture, value reduces with time.

Optical properties	ViPrint Pure Glass 0009	ViPrint Pure Glass+ 0004	ViPrint Pure Glass Ultimate 0007
Haze (%)	8.7	6.2	4.5
Clarity (%)	99.1	99.3	99.4

Values relates to material in 400µm.

## 5. Adhesion and preparation characteristics

	UV Litho	UV Digital	UV Screen
Compatibility	√	√	√
Printability guarantee	1 month*	1 month*	1 month*

\*From the date of production.

## 6. Recommendations

### Storage:

- Always stock the sheets at room temperature to avoid risk of condensation (e.g. sudden changes of temperature from hot to cold or vice versa) and to avoid physical distortion due to extreme hot or cold.
- Store in its original packaging, protected from light, dust, air and moisture, at a temperature close to 20 °C in order to preserve the surface treatment.
- Do not stack pallets.

### Preparation:

- Before conversion, keep the sheets at ambient room temperature for 24 to 48 hours to allow full acclimatisation and to avoid risks of condensation or physical distortion due to extreme hot or cold temperatures.
- The lot number attached to each pallet is to be kept on file should you have a quality or technical question regarding this delivery.

### Printing:

- The surface tension (Dyne level) will decrease with moisture content and over time. To preserve the corona treatment dyne level please store sheets in their original packaging and store away from damp or dusty environments.
- Check corona level and production date before processing.
- Pre-test the printability of the substrate and process according to the recommendations of the ink suppliers (in particular on the compatibility of polypropylene inks and the required surface tension).
- To protect the ink against abrasion, we recommend that you apply a protective varnish.
- Chevrons are possible, visible on one face and on certain colours.

### Embossing:

- Use suitable polypropylene films.

### Cutting and creasing:

- Before cutting, leave the sheets at room temperature between 24 and 48 hours to stabilise the temperature at the core of the pallet to avoid cracking or breaking of the sheet.
- On cutting boards (manual or automatic), sheet thicknesses from 0.30 to 1.00 mm are cut and cold-grooved. For the higher thicknesses, hot creasing is recommended.
- Use cutting knives suitable for cutting polypropylene to avoid breakage and cracking.
- Half-cut or double-groove blades improves the hinge effect and reduces rounding of the fold.

### Trimming:

- Thin sheets can be cut on the traditional cutter with a double-edged blade.
- For thicknesses over 0.80 mm, cutting can cause burrs, filaments and angel hair.

### Assembly:

- The sheets can be welded by ultrasound or hot air (depending on the thickness) or assembled with PUR glue.
- Use adhesives suitable for polypropylene.
- Under certain conditions, inks, glues or other components in contact with polypropylene may react and cause deformation of the sheet. Prior testing is required to ensure compatibility with polypropylene.

### Thermoforming:

This product is not recommended for thermoforming.

## 7. Compliance

The raw materials used meet the following directives and standards:

### CREA

Colour	Toy Standard EN71/3	94/62 Directive	2002/95/EC RoHS - DEEE Directive	SVHC REACH 1907/2006/EC	UE N°10/2011 Directive
Transparent 0009	√	√	√	√	√
Transparent 0004	√	√	√	√	√
Transparent 0006	√	√	√	√	√
Transparent 0007	√	√	√	√	√

### ECO

Colour	Toy Standard EN71/3	94/62 Directive	2002/95/EC RoHS - DEEE Directive	SVHC REACH 1907/2006/EC	UE N°10/2011 Directive
30 % Transparent recycled	—	—	—	—	—

#### Toy standard EN 71/3:

Toy standard EN71 part 3 for toys.

#### 94/62 Directive:

European Directive 94/62/EEC as amended by Directive 2004/12/EC, supplemented by the decision of the Committee 2005/20/EC limited to 100 ppm heavy metals in plastic packaging for Member states of the EU.

#### RoHS - DEEE Directive:

RoHS - DEEE Directives 2002/95/EC concerns, 2002/96/EC and 2003/11/EC transposed in French law by Decree 2005-829 of 20/07/05, as amended by Directives 2005/71/EC, 2005/618/EC and 2011/65/EU to the restriction of certain components in electrical appliances.

#### REACH:

- Free of substances listed in the Candidate List update at the date of creation of this product data sheet.
- Free of (substances subject to authorisation (Annex XIV amended by Regulation 17/02/2011 N143/2011 and N125/2012 Regulation of 14 February 2012).
- Free of restricted substances (Annex XVII amended by Commission Regulation N ° 552/2009, No. 494/2011, No. 109/2012 and No. 412/2012).

#### EU N°10/2011 Directive:

EU Regulation N° 10/2011 of 14 January 2011 as amended by EU Regulation N° 1183/2012 of 30/11/2012 and by the EU Regulation N° 1282/2011 of 28/11/2011 and N° 321/2011 Of 02/04/2011. This Regulation repeals Directive 2002/72/EC on plastic materials and articles intended to come into contact with foodstuffs.

Please request this information with order.

**Disclaimer:** The information contained in this leaflet is based on our present technical knowledge and experience. In view of the large number of factors that may influence the processing and use of our products, the information does not relieve the processors and manufacturers of the need to carry out their own tests and experiments. Our information does not constitute a legally binding assurance of product availability, of particular properties or of a suitability for a particular use. Patent rights that may exist must be duly observed.