

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 ViPrint **Pastel** collection designed for the needs of the market:

- Stationery
- Packaging
- Decoration
- Display
- Toy

Low density, light weight, flexible and resistant, it is ideal for applications such as: notebook covers, pouches, binders, cases and cases of luxury, lampshades and mobile...

ViPrint **Pastel** is a standard range available **from 0.28 to 2.00 mm** as well as in **XXL** and **xxs** sheet sizes. Minimum order quantity **from 500 kg**.

Sorbet offers a selection of **8 opaque shades** with innovative, elegant and current tones, in fine sand/ sand finish (G02).

Both types of formulation are processed as standard with corona treatment on both sides, **allowing offset printing UV, traditional screen printing and UV, UV digital.** 

It is recommended to print the sheets within 6 months for screen printing, 3 months in UV and digital offset, from the date of manufacture.

The product does not release a chlorine gas when burnt, unlike PVC, ViPrint offers the advantage of an environmentally friendly and recyclable PP sheet.

#### ViPrint, is...

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

AXIPACK

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### Colour range



### **Dimensions (mm)**

Width	Length
500 to 1,400	700 to 1,800
900 to 1,400*	1,801 to 2,200*

\*Sheets XXL (> 1,800 mm) Sheets XXL et xxs: On request

## Minimum order quantity

	Standard size	XXL size
Minimum order quantity (kg)	500	1,000
Minimum campaign (kg)	-	1,000

### Services

- > Service sheets cut square
- > Service special sheet sizes made to order
- > Service special: xxs et XXL sheet sizes available on request



# Surface Embossing

G	02	
Front Fine sand	Back Sand	

# Thickness (µm) - Density

Thickness	Density
280 to 400	0.93
410 to 2,000	0.92



### 1. General characteristics of the product – Environment

- 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

### 2. Surface aspects & minimum manufacturing quantities

Embossing	G02
Front	Fine Sand
Back	Sand

	Standard size	XXL size
Minimum order quantity (kg)	500	1,000
Minimum campaign (kg)	-	1,000

	Minimum order quantity* (kg)	Campaign* (kg)
Standard sheet size	500	-
xxs sheet size	1,000	1,000
XXL sheet size	1,000	1,000

\*Per thickness / sheet size / colour Additional costs xxs / XXL: On request

## 3. Dimension Tolerances

### 3.1. Extrusion

a/ Available sheet sizes

Thickness (µm)	280	350	500 I	800 I	2,000
Width (mm)	500 - 1,200	500 - 1,250	500 - 1,400	500 - 1,400	
Length (mm)	700 - 1,200	600 - 1,800	650 - 1,800	500 - 1,800	

Special widths: On request

b/ XXL Dimension (Length > 1,800 mm)

Thickness (µm)	800	2,000
Width (mm)	900 - 1,400	
Length (mm)	1,801 - 2,200	)

xxs Size – Special width : On request

#### c/ 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 across 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).



# 3.2. Square cut

a/ Available sizes (Post cut)

Thickness (µm) 3	50 	400 I	800 I
Width (mm)	500 - 1,250	500 - 1,300	
Length (mm)	700 - 1,300	700 - 1,300	

b/ Dimensional tolerances (Post cut)

	Unit	Mini	Max
Thickness	μm	-20	+20
Width	mm	0	+1
Length	mm	0	+1
90° Angle	degree	-0.2	+0.2
Angle in mm	mm	0	+1

Tolerances are based on our standard sizes specifications.

The following tolerances apply to normal operating conditions (around 20 °C).

In the case of any change of temperature, ViPrint (as all thermoplastics) may show tolerances variations (due to thermal expansion). Cutting service: consult us

### 4. Mechanical properties

Properties	Method	Unit	Value
Specific weight Thickness ≤ 0.400 mm Thickness ≥ 0.410 mm	_	g/cm³	0.93 0.92
Tensile strength(Youngs Modulus)	ISO 527-2	Mpa	ND
Tensile strength	ISO 527-2	Мра	ND
Elasticity	ISO 527-2	%	ND
Impact strength Izod	ISO 180	kJ/m²	ND
Surface tension both sides	-	dynes	46 [1]
Coefficient of thermal expansion	-	K-1	1.5 10-4

Value relates to material in 500  $\mu m.$   $^{(1)}$  At the time of manufacture, value reduces with time.

# 5. Adhesion and preparation characteristics

	UV Litho	UV Digital	Traditional, UV Screen
Compatibility			
Printability guarantee	3 months*	3 months*	6 months*

\*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.

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## 7. Compliance

The raw materials used meet the following directives and standards:

Colour	EN 71/3 Toy Standard	4/62 Directive	D2002/95/EC RoHS - DEEE Directive	SVHC REACH 1907/2006/EC	UE N°10/2011 Directive
Green 6131					
Yellow 2120					
Rose 4141					
Blue 5325					
Lilac 5251					
Coral Pink 4121					
Grey 8110					
Peach 3115					

#### EN 71/3 Toy standard:

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

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