

Axipack, the European leader in extrusion of recyclable polypropylene sheets and coils, offers its wide range of ViPrint products for graphic and industrial applications.

# The STARWHITE Collection

Primarily for the **promotional communication and visual applications markets**, the Starwhite Collection is THE ideal white sheet for your double-sided printing. Starwhite is available in ViPrint **CREA**, in ViPrint **ECO**, made of 50 % recycled formulation.

Thanks to its excellent opacity, the result of your prints will be improved.

Starwhite is THE perfect solution for your POS and display applications such as display stand, poster, banner for linear sales, roll up banner...

The Starwhite Collection is available in **2 surface finishes G01 and G02** to meet the requirements of all printing machine processes with (XXL) sheet sizes available. THE material is suitable for **both single or double-sided print**.

This range is available in G01 from 0.28 mm to 1.20 mm and in G02 from 0.28 mm to 2.00 mm and in XXL formats, from 500 kg and offers amazing manufacturing flexibility.

Due to its formulation and processing characteristics, such as the front and back corona, ViPrint is printed in **UV offset, traditional screen printing and UV and digital UV**.

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

PP sheets do not release any chlorine gases when burnt, unlike PVC, ViPrint offers the advantage of a more environmentally friendly and recyclable material.



### 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.

Part of the epsotech Group

# Colour range



 $Starwhite ECO50: colour\ variations\ are\ possible\ from\ one\ batch\ to\ another\ and\ within\ the\ same\ batch.$ 

### **Grains**



# Thickness (µm) - Density<sup>1</sup>

Thick	Doneity	
CREA	EC0	Density
280 to 2,000	300 to 2,000	0.94

<sup>&</sup>lt;sup>1</sup> Refer to § 3.1.a

## Dimensions (mm)<sup>1</sup>

Grain	Laize	Longueur
G01	500 to 1,400	650 to 1,800
G01 XXL	900 to 1,400 *	1,801 to 3,200 *
G02	500 to 1,400	600 to 1,800
G02 XXL	900 to 1,400 *	1,801 to 2,200 *

<sup>&</sup>lt;sup>1</sup> Refer to § 3.1.a

XXL and xxs sizes: consult us

# **Minimum Order Quantity**

	Standa	XXL	
	CREA	EC0	size
Order Min (kg)	500	500	1,000
Campaign Min (kg)	-	500	1,000

### **Services**

> ViPrint Color G02 available on stock service catalogue, with D+1 departure:

# Direct Line: ## +33 (0)3 21 61 66 65 - ★ stock.service@axipack.fr

Col	our G01	Thickness (mm)	Dimensions (mm)	Packaging	
				Sheets/Parcel	Sheets/Pallet
	White 1107	0.30	1.400 x 1.000	X	X

- > Cutting service for edge trimming
- > Cutting service for your specific dimensions
- > Cutting service for non standard dimensions: xxs and XXL available



<sup>\*</sup> XXL Sizes (> 1,800 mm)

### 1. Product characteristics - Environment

### **CREA**

- Sheet composed predominantly of polypropylene, polyethylene and an antistatic additive, plus colourant if required.
- Recyclable sheet, whose composition complies with the REACH regulation.
- Treated corona 2 both sides, adapted to the techniques of offset printing UV, screenprint UV and digital UV.
- Options when ordering are trimmed square sheets (xxs, XXL) or UV treatment.
- Halogen-free, ozone-depleting substances, are without phthalate.

#### **ECO**

- Sheet made from post-industrial recycled material and virgin (polypropylene, polyethylene and antistatic agent, and colourant formulation).
- The StarwhiteEC050 range is recyclable.
- The StarwhiteEC050: 50% recycled post-industrial and 50% virgin material.
- 2-sided corona treated, suitable for UV offset printing, UV screen printing and UV digital printing.

## 2. Surface finish & Production Minimum

Embossing	G01	G02
Front	Fine sand	Fine sand
Back	Fine sand	Sand

G01 - G02	Standa	XXL size	
	CREA	EC0	AAL SIZE
Minimum order quantity (kg)	500	500	1,000
Minimum campaign (kg)	-	500	1,000

<sup>\*</sup>Per size/thickness/colour xxs / XXL costs: consult us

## 3. Dimensions characteristics

### 3.1. Extrusion

a/ Available sizes

### **CREA**

G01					
Thickness (µm)	280	400	700	800	1,200
Width (mm)	500 - 1,000	500 - 1,300	500 - 1,350	500 - 1,400	
Length (mm)	700 - 1,400	650 - 1,800	600 - 1,800	500 - 1,800	

G02									
Thickness (µm)	280		350		500		800		2,000
Width (mm)		500 - 1,200		500 - 1,250		500 - 1,400		500 - 1,400	
Length (mm)		700 - 1,400		600 - 1,800		600 - 1,800		500 - 1,800	

#### **ECO**

G01									
Thickness (µm)	300		400		700		800		1,200
Width (mm)		500 - 1,000		500 - 1,300		500 - 1,350		500 - 1,400	
Length (mm)		700 - 1,400		650 - 1,800		600 - 1,800		500 - 1,800	
G02									
Thickness (µm)	300		350		500		800		2,000
Width (mm)		500 - 1,200		500 - 1,250		500 - 1,400		500 - 1,400	
Length (mm)		700 - 1,400		600 - 1,800		600 - 1,800		500 - 1,800	

### b/XXL dimensions (length > 1,800 mm)

### **CREA**

G01				
Thickness (µm)	500		700	1,200
Width (mm)		900 - 1,350	900 - 1,400	
Length (mm)		1,801 - 3,200	1,801 - 3,200	

G02			
Thickness (µm)	80	0	2,000
Width (mm)		900 - 1,400	·
Length (mm)		1,801 - 2,200	

xxs dimensions: consult us Specific width: consult us

### **ECO**

G01				
Thickness (µm)	500		700	1,200
Width (mm)		900 - 1,350	900 - 1,400	
Length (mm)		1,801 - 3,200	1,801 - 3,200	

G02			
Thickness (µm)	80		1,600
Width (mm)		900 - 1,400	
Length (mm)		1,801 - 2,200	

xxs dimensions: consult us Specific width: consult us

### c/ Dimensional tolerances

G01 - G02	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 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).

### 3.2. Square cut

a/ Available sizes (post cut)

Thickness (µm)	350 		400 		800
Width (mm)		500 - 1,250		500 - 1,300	
Length (mm)		700 - 1,300		700 - 1,300	

### b/ Dimensional tolerances (post cut)

G01 - G02	Unit	Min	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  $^{\circ}\text{C}$  ).

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

# 4. Mechanical properties

Properties	Method	Unit	Value	
Specific weight Thickness ≤ 0.400 μm Thickness ≥ 0.410 μm		g/cm³	0.94	
Modulus of elasticity (Young)	ISO 527-2	Мра	ND	
Tensile Strength	ISO 527-2	Мра	ND	
Yield strength	ISO 527-2	%	ND	
Izod impact	ISO 180	kJ/m²	ND	
Surface tension (2 sides)	-	dynes	46 [1]	
Coefficient of Thermal expansion	-	K <sup>-1</sup>	1.5 10-4	

Only applies to ViPrint Starwhite. Value relates to material in 500 µm.

# 5. Adhesion and preparation characteristics

	UV Litho UV Digital		UV Screen	
Compatibility	$\sqrt{}$	$\sqrt{}$		
Printability garantee	3 months*	3 months*	6 months*	

<sup>\*</sup>From the date of production

 $<sup>^{\</sup>mbox{\scriptsize [1]}}$  At the time of manufacture, value reduces with time.

### 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:

Color	Toy Standard EN71/3	94/62 Directive	2002/95/EC RoHS - DEEE Directive	SVHC REACH 1907/2006/EC	UE N°10/2011 Directive
White 1107	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$

Only applies to ViPrint Starwhite.

#### 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.

Produced with care in Europe