

CAROLEX

Graphic Arts Department

Carolex Graphic, a leading European producer of extruded polypropylene sheets and reels, offers an extensive range of ViPrint™ - ViSpec™ suitable for graphic arts and industrial applications.

ViPrint Color G02

ViPrint™



The ViPrint COLOR G02 range is designed to meet the needs of the following markets:

- promotional communication,
- panel and display,
- labeling,
- the promotional case,
- stationery,
- technical applications.

Low density, lightweight, flexible and chemical resistant, it is ideal for applications such as: folders, personalised ring binders, promotional items, small POS, promotional stationery, folders, files, dividers, menu cards, file reinforcement...

ViPrint™ COLOR G02 is a range of **sheets** available from **280 µm to 2 mm** and in **XXL** and **XXS format**. Made to measure to your requirements with a minimum order quantity of **500 kg**. A stock range is also available in stock service (white and black). Available in a choice of **20 attractive opaque standard colors** (UV treatment available on request).

ViPrint PP formulation and treatments (specific or standard) such as the corona treatment on both sides, allow ViPrint to be used in **UV offset printing, traditional and UV screen printing as well as digital UV**.

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

Not giving off a chlorine gas when it burns, 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.*

Colour range

« Color » range			
	White 1155		White 1170
	Beige 2120		Purple 5119
	Blue 5140		Blue 5160
	Blue 5175		Green 6255
	Green 6175		Green 6232
	Green 6203		Yellow 1906
	Orange 3151		Red 4210
	Red 4185		Fuschia 4139
	Grey 8110		Grey 8125
	Grey 8170		Black 9170

Colour matching on request, minimum order quantity 1 500 kgs.

Embossing

Embossing	Top	Bottom
	Fine sand	Sand
G02		

Thickness (µm) - Density

Thickness	Density
280 to 400	0.93
≥ 410	0.92

Dimensions (mm)

Width	Length
500 to 1 400	700 to 1 800
900 to 1 400 *	1 801 to 2 000 *

*XXL sizes
XXS sizes: consult us

Production Minimum

	Standard size	XXL size	UV treatment
Order Min (kg)	500	1 000	1 000
Campaign Min (kg)	500	3 000	1 000

Services

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

Direct Line: +33 (0)3 21 61 66 65 - stockservice@vitasheetgroup.fr

Colour	Thickness (mm)	Dimensions (mm)			Packaging	
		70 x 100	65 x 110	80 x 120	Sheets/Parcel	Sheets/Pallet
White 1155	0.30	x			x	x
	0.50	x	x	x	x	x
	0.80		x	x	x	x
	1.20		x	x	x	x
Black 9170	0.50	x	x	x	x	x
	0.80	x	x	x	x	x
	1.20	x	x	x	x	x

- > Specific colour matching service to Pantone/RAL or Contretype references with a minimum of 1 500 kgs
- > Cutting Service for rounded corners
- > Cutting service for edge trimming
- > Cutting service for your specific dimensions
- > Cutting service for non standard dimensions: XXS and XXL available
- > Special Formulation for UV protection etc.



1. Product characteristics

- Sheet composed predominantly of polypropylene, polyethylene and an antistatic additive, plus colorant 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.

2. Surface finish & Production Minimum

Embossing	G02	Ra
Top	Fine sand	1 - 3
Bottom	Sand	3 - 5

	Production minimum* (kg)	Campaign* (kg)
Standard size	500	-
XXS size	1 000	3 000
UV treatment	1 000	-

*Per size/thickness/colour

3. Dimensions characteristics

3.1. Extrusion

a/ Available sizes

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

Except fuchsia 4139: consult us.

b/ XXL dimension (length > to 1800 mm)

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

XXS size: consult us

Extrusion direction: consult us

c/ Dimensional tolerances

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

Tolerances are based on our standard size 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 tolerance variations (due to thermal expansion).

3.2. Cut Square

a/ Available sizes

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

b/ Dimensional tolerances

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

Tolerances are based on our standard size specifications.

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

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

Refente : contact us

4. Mechanical properties

Properties	Method	Unit	Value
Specific Weight			
Ep ≤ 0.400 µ		g/cm ³	0.93
Ep ≥ 0.410 µ			0.92
Modulus of elasticity (Young)	ISO 527-2	Mpa	ND
Tensile Strength	ISO 527-2	Mpa	ND
Yield strength	ISO 527-2	%	ND
Izod Impact	ISO 180	kJ/m ²	ND
Surface tension	-	dynes	46 ⁽¹⁾
Coefficient of Thermal expansion	-	K ⁻¹	1.5 10 ⁻⁴

Value relates to material in 500 µm.

⁽¹⁾ at the time of manufacture, value reduces with time.

5. Adhesion and preparation characteristics

	UV Litho	UV Digital	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 in your file and to inform us if 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 transform 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 colors.

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 greater than 0.80 mm, cutting can cause burrs, filaments and angel hairs.

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:

Colour	Toy Standard EN 71/3	Directive 94/62	Directive 2002/95/EC RoHS - DEEE	SVHC REACH 1907/2006/EC	Directive UE N°10/2011
White 1155	√	√	√	√	√
White 1170	√	√	√	√	√
Yellow 1906	√	√	√	√	√
Beige 2120	√	√	√	√	√
Orange 3151	√	√	√	√	√
Fuchsia 4139	√	√	√	√	
Red 4185	√	√		√	
Red 4210	√	√	√	√	√
Purple 5119	√	√	√	√	√
Blue 5140	√	√	√	√	√
Blue 5160	√	√	√	√	√
Blue 5175	√	√	√	√	√
Green 6175	√	√	√	√	√
Green 6203	√	√	√	√	√
Green 6232	√	√	√	√	√
Green 6255	√	√	√	√	√
Grey 8110	√	√	√	√	√
Grey 8125	√	√	√	√	√
Grey 8170	√	√	√	√	
Black 9170	√	√	√	√	
Other colours			Consult us		

Toy standard EN 71/3:

Toy standard EN71 part 3 for toys.

Directive 94/62:

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.

Directive RoHS - DEEE:

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).

Directive EU N°10/2011:

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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