

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 Collection

The **Tonic** Collection is characterised by its **distinctive fluorescent colours**.

Tonic is now available in fine sand / sand (G02) and glossy / sand (G04).

The collection is available on production **from 500 kg**.

The sheets are corona treated on both sides, allowing UV offset, traditional and UV screen and UV digital printing.

The **Tonic** Collection meets the needs of markets:

- Promotional communication;
- Signage and display;
- Labelling;
- Promotional packaging;
- Stationery.

Low density, light, flexible and durable light, flexible and resistant, it is ideal for applications such as: suitcases, personalised folders, promotional items, small point-of-sale displays, promotional stationery, pockets, dividers, shelfstoppers, card, reinforcement...

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.



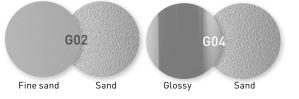
Part of the epsotech Group

Colour range



All colours are available in G02 and G04, except *Purple 5311, in G02 only.

Surface Embossing



Thickness (µm) - Density

| Thickness | Density |
|------------|---------|
| 400 | 0.93 |
| 410 to 800 | 0.92 |

Dimensions (mm)

| Width | Length |
|------------|-----------------|
| 600 to 700 | 700 to 1,400 |
| 600 to 800 | 1,801 to 1,600* |

*Sheets XXL (> 1,800,mm). Sheets XXL and xxs range: On request.

Minimum Order Quantity

| | Standard size |
|--------------------|---------------|
| MOQ (kg) | 500 |
| Campaign Min. (kg) | 3,000 |

Services

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





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

| Grain | G02 | G04 |
|-------|-----------|--------|
| Front | Fine sand | Glossy |
| Back | Sand | Sand |
| | | |

| | Format standard |
|-----------------------|--------------------|
| MOQ (kg) | 500 |
| Minimum campaign (kg) | 3,000 |

*Per thickness / sheet size / colour

3. Dimension Tolerances

3.1. Extrusion

a/ Available sheet sizes

| Thickness (µm) 4 | 00 | 500 I | 800 I |
|------------------|-------------|-------------|-------------|
| Width (mm) | 600 - 700 | 600 - 800 | 600 - 800 |
| Length (mm) | 700 - 1,400 | 700 - 1,600 | 700 - 1,600 |

Special widths: On request

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

Contact us.

| Thickness (µm) 8 | 00 2,000 |
|------------------|---------------|
| Width (mm) | 900 - 1,400 |
| Length (mm) | 1,801 - 2,200 |

Sheet size xxs: On request - Special widths: 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) 4 | 00 | 500 I | 800 I |
|------------------|-------------|-------------|-------------|
| Width (mm) | 500 - 1,250 | 500 - 1,300 | 500 - 1,300 |
| Length (mm) | 700 – 1,300 | 700 - 1,300 | 700 - 1,300 |

b/ Dimensional tolerances (Post cut)

| | 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 °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 | Мра | 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 μ 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 guality or technical guestion 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.

Produced with care in Europe

AXIPACK Part of the epsotech Group

7. Compliance

The raw materials used meet the following directives and standards:

| Colour | EN 71/3 Toy Standard | 94/62 Directive | 2002/95/EC RoHS - DEEE Directive | SVHC REACH 1907/2006/EC | UE N°10/2011 Directive |
|-------------|----------------------|-----------------|-------------------------------------|----------------------------|---------------------------|
| Blue 5211 | \checkmark | | \checkmark | | |
| Purple 5311 | \checkmark | | | | |
| Green 6311 | | | | | |
| Yellow 2310 | | | \checkmark | | |
| Pink 4310 | | | | | |
| Orange 3312 | | | | | |

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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