

Réf.
Range

Opaline
Translucent

Embossing
(top / underside)

Sand / Pearl

Composition

- Polypropylene sheet
- Halogen free, no substances that can damage the ozone layer
- Inert waste, non toxic and 100% recyclable
- Decomposition products by fire : carbon dioxide CO₂, vapour H₂O

Physical properties

Properties	Units	Test method**	Values**	Tolerances
Thickness	µm	ISO 4593	300 to 2000	+0,02mm / -0,03mm
Density	g/cm ³		0,91	+/- 0,01 g/cm ³
Flexural Elastic Modulus	MPa	ASTM D 790 tested on 500µm sample	760	+/-5%
Tensile strength at failure	N/mm ²		> 20	
Elongation at failure	%		> 100	
Tensile Impact test	kJ/m ²	ISO 8256 tested on 500µm sample	230	
Elmendorf Tear resistance	mN	ISO 1974 tested on 500µm sample	5400	+/-3%

** These values are given as indicative for a standard quality and based on the standards mentioned.

The physical properties of the material will change with the temperature conditions.

Near or below 0°C, the material will become brittle. Therefore, for low temperature applications, please contact us for a specific product.

As a thermoplastic, the material may lose stiffness, with increasing temperatures. It may also swell. These changes are noticeable around 70°C. The Melting point of our product is around 140°C.

Chemical properties

- Resistant to water, fats, alcohols and some solvents.
- Polypropylene can swell if exposed to certain solvents.
- Polypropylene along with several other plastics, can be distorted by some conventional litho inks. If the Priplak® is to be used within a litho printed job, avoid litho inks with mineral oil distillate. Vegetable / Soya based inks or similar are known to work well. Check with your ink supplier. Perform trials if in any doubt.

Sheets size tolerance

Sheet size :	0/+5mm (machine and cross direction) option of guillotine trimming
Sheet flatness :	5mm on both sides

Use conditions

- Acclimatisation at room temperature 24 to 48h after delivery
- Pallets not to be stacked.

Printing on Priplak®

Printing UV technology

- Priplak® is corona treated on both sides in order to allow printing in UV offset (litho-printing), UV screen and UV ink jet printing. Surface tension, during production, is above 46dyn/cm but decreases with time. The treatment is guaranteed for 3 months from the manufacturing date, marked on labels. Priplak recommend a surface tension of at least 40dyne/cm to allow printability.
- Priplak advise customers to request material which has been guillotine trimmed on 4 sides where automatic feed systems are used. Our products are anti-static treated to make this easier and avoid any dust.
- Priplak recommend special inks for polypropylene. Details can be obtained from your ink supplier. Preliminary trials/testing are advised.
- In order to protect the print and to prevent ink scratching, we recommend that you apply a protective varnish especially for UV offset.

Other printing technology

- Conventional screen (1 pack or 2 packs inks.) Priplak® can be printed with a surface tension down to 40 dyne/cm. It is recommended to test before printing.

Cutting / Creasing on Priplak®

- Priplak recommend converting the material at temperature around 20°C.
- Cutting and creasing are possible on manual and auto-platens, as used in the cardboard industry. Creasing is mainly done “cold”, i.e. normal working conditions. It can also be done with heat for high thickness or special cases.
- Use of semi-cutting blades for creasing is not advisable for Priplak® because they may generate an initial tear.
- In any case, the creasing process lengthens the material, and it is necessary to take this into account during the tooling design and manufacture.
- Cutting Priplak® in smaller sizes than delivered, especially A4 size and smaller, can release tension within the sheet, that can cause curl.

Assembling

- Priplak® can be glued, screwed, punched, perforated, sewn, ultrasonic / hot air welded...
- For glueing, we recommend 2 different types :
 - hot melt polyurethane reactive (PUR)
 - cyanoacrylates
- If Priplak® is in contact with printed surfaces (Priplak® used as cover) or laminating, we recommend that you test Priplak® compatibility with the other products involved. Indeed, some glue components, and inks containing proportion of distillates, used in paper printing, can generate curl when in contact with Priplak®

Storage conditions

Store in its original plastic wrapping, at a temperature around 20°C, away from light.

Compliance with legislation

colour	toy norm EN 71/3	food regulation Directive 2002/72/EC	Coneg norm Directive 1994/62/EC	RoHS Directive 2002/95/EC
Natural 000	✓	✓	✓	✓
Lemon zest 122	✓	✓	✓	✓
Orange zest 219	✓	✓	✓	✓
Raspberry 337	✓	✓	✓	✓
Dark blue 413	✓	✓	✓	✓
Turquoise 415	✓	✓	✓	✓
Pale blue 417	✓	✓	✓	✓
Pacific blue 437	✓	✓	✓	✓
Violet 438	✓	✓	✓	✓
Lime zest 509	✓	✓	✓	✓
Ash grey 915	✓	✓	✓	✓
Other colours	Please contact us			

✓ complies with the mentioned standard.

Toys norm : NF EN 71-3 (March 1995)

relating to safety of toys – Part 3 : migration of certain elements

Food regulation : comply with Directive 2002/72/EC (Commission of 6 August 2002)

relating to plastics materials and articles intended to come into contact with foodstuffs as well as its successive amendments

Nota bene : When legislation specifies maximum migration levels, these must always be checked on the finished product using the recognized test methods of the country concerned.

Coneg norm (USA) & Directive 94/62/EC :

relating to packaging and packaging waste

Heavy metals (cadmium, lead, mercury, and chromium (VI)) content below 100ppm

RoHS Directive 2002/95/EC (European Parliament and the Council of 27 January 2003) :

comply with requirements on the restriction of use of certain hazardous substances in electrical and electronic equipment.

Compounds of heavy metals (Cadmium, Lead, Mercury and Chromium VI) and flame retardants (polybrominated biphenyls (PBB), polybrominated diphenyl ethers (PBDE)) have not been intentionally added in our formulation while manufacturing.

Therefore, our Priplak products do not contain any of these compounds with the exception of traces.

The information contained within this document are non contractual and are based on data given by our suppliers and on the present state of our knowledge. They are given in good faith and considered as correct. The manufacturer reserves the right to change the product, or its technical characteristics, without notice. However, as we do not control post-processing techniques and conditions of use, this is information may not be extended to end products and does not constitute a guarantee for any specific application. So, you are requested to check its validity and suitability for the intended method of converting and application.

PRIPLAK® OPALINE is a registered trade mark of **PRIPLAK**.

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