

	Information Data Sheet EPLAK® SANDY (M/M) EPLAK® CLASS (M/Q)	Rev. 12 Date: 29/01/2021 Pag. 1 di 4
	TECHNICAL SPECIFICATION ST-GQ-GAL-EPK11-GB	

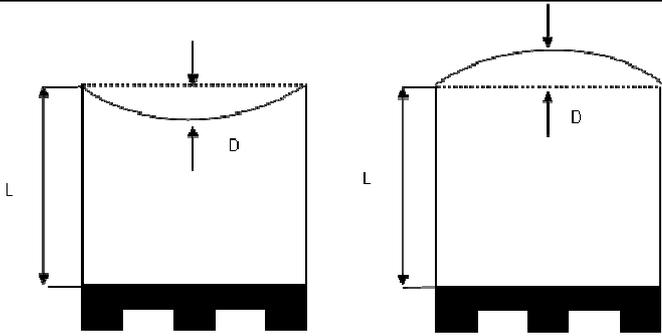
Description: polypropylene sheet suitable for printing, welding and gluing available with the following embossing:

- **Sandy:** a fine matt (M) embossing on both sides.
- **Class:** fine Matt embossing on one side (M), and a grainier embossing (Quartz) on the other side (Q).

Main component: polypropylene (PP)

Main applications: Stationery, point of sales, packaging, printing, etc. Suitable for flexography, screen printing, digital and off-set printing.

Colours (*): Colours and opacity are defined according to the reference sample.

CHARACTERISTICS				
Theoretical gravity weight	0,92 g/cm ³			
Sheet dimensions (*)	Thickness:	0,30 mm – 2,00 mm ± 5% fino ad un max di ± 0,05 mm		
	Length:	0,30 mm ≤ thickness < 0,80 mm Thickness ≥ 0,80 mm	500 mm ≤ length ≤ 1500 mm 500 mm ≤ length. ≤ 2000 mm	
	Width:	0,30 mm ≤ thickness < 0,40 mm 0,40 mm ≤ thickness < 0,50 mm Thickness ≥ 0,50 mm	800 mm ≤ width ≤ 1000 mm (max) 800 mm ≤ width ≤ 1280 mm (max) 800 mm ≤ width ≤ 1300 mm (max)	
	Tolerances on dimensions:	Length / Width: ± 3 mm		
	Difference between diagonals:	Size (diagonals)	1000 mm	2000 mm
		Tolerance	< 4 mm	< 10 mm
Sheet planarity	± 0,6% length short side			
Pallet planarity				
	Pallet Planarity D: ≤ 3% pallet height (L)			
Coefficient of thermal expansion	Value included between 100-200 μ°/C/m			

Chemical resistance

EPLAK® sheets have good chemical resistance against the majority of alkaline products, salts solutions, solvents and heavy mineral acids at temperatures lower than 60°C. They can be on the other side etched by heavy oxidative agents, nitric acid, hydrogen peroxide and chlorosulphonic acid. Waving can be caused by a prolonged aliphatic, aromatic and chlorinated hydrocarbons etching.

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Polypropylene is a biologically recalcitrant polymer, that is suitable to be used as packaging material during sterilization process with ethylene oxide (EtO) in gaseous phase. Potential effects of attack by EtO on polypropylene are limited to its liquid and technological pure phase, whereas the use of EtO in gaseous phase should not represent particular bias. Microorganism deactivation by EtO depends on various factors, which are: gas concentration, temperature, relative humidity and reaction time. Since these process conditions are chosen by the Customer, the User is advised to make his or her own tests to determine the suitability of polypropylene in the particular environment.

POSSIBLE TREATMENTS –ON CUSTOMER’S REQUEST WHEN ASKING FOR QUOTATION

- Corona Treatment:** The sheet is treated on both sides to obtain a better ink key or glue bodying. Value off extrusion: 46 dyn/cm. Please note that corona treatment naturally fades over time. We do recommend to store EPK at temperatures between 5°C and 30°C in order to maintain product features as long as possible. If stored correctly, Eplak can be successfully printed up to three months after extrusion (42 dyn/cm). We recommend as a good practice to print Eplak sheet as soon as as possible from delivery and in any case, check corona treatment and compatibility with printing inks before proceeding to printing. Whenever corona treatment should fade under 40 dyn/cm, we recommend to use a primer before processing Eplak sheets. It is recommended to use inks that are dedicated to non absorbing materials. For UV – printing please ask to your ink supplier for specific technical advice.

Regarding food contact compliance requirements, we would like to inform you that corona treated Eplak® sheets are suitable for applications that foresee indirect food contact.

Whenever its required to guarantee direct food contact, we kindly advise you to notify our sales department prior to obtain the commercial offer; in this case we suggest to select Eplak® sheets without corona treatment and convert by using low odor and low migration primers and inks in order to obtain the best result in terms of organoleptic properties.

- Antistatic treatment:** to reduce static loadings, improving handling of the sheets and its aspect (dust-free). Antistatic additive is not compatible with off-set printing due to deposits on the caucchiù and development of coats
- Anti-UV treatment:** addition available upon request, in case of outdoor applications. In order to manage correctly the product design, Customer is pleased to notify our sales departments when submitting initial request for a material to be suitable for outdoor use and/or need withstand generic UV irradiation, providing the following information:
 - Type of exposition of the finished article (direct sunlight / internal / outdoors);
 - Minimum requested endurance (target time) in that environment.

The interaction of chemicals such as varnishes, solvents, printing inks and cleaning agents could jeopardise the UV endurance of the finished article. Please verify the compatibility with polypropylene. Any outdoor use of polypropylene material is made at the Customer’s own risk unless the above minimum information has been notified in writing.

Karton will not be held liable for any fault/complaint arisen due to articles that have not been specifically designed and validated (by Karton or by the Customer) for being used outdoors and protected with specific anti-UV addition, nor Karton will be held liable for any interactions between its own manufactured products and further treatments that are not under its own responsibility.
- Flame retardant treatment:** Please see dedicated Information Data Sheet

AVAILABLE PROCESSES – ON CUSTOMER’S REQUEST WHEN ASKING FOR QUOTATION

- Trimming:** It enables to obtain quadrangular sheets with tolerances on dimensions lower than the standard: length/width: ± 1 mm. Diagonals difference ≤ 2 mm.

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- **Die cutting:** It enables to obtain finished articles with variable shape, identical one the other. Standard die-cutting guarantees a cleaning of scraps of 96% approximately. Consequently, a possible presence of scraps in a percentage not exceeding 4% has to be taken into consideration. Only upon request of the customer in writing, agreed-upon with our sales / quality department, it is possible to increase the effectiveness of the cleaning of scraps up to a percentage equal to 99-100%.
- **Printing out of line:**

Printing	Print centering	Colour centering
Positioned flexographic print, up to 5 colour (max dimensions of printing 2030*1300 mm)	± 4 mm	± 2 mm
Off-set print	± 4 mm	± 0,12 mm
Screen print	± 4 mm	± 0,3 mm
Digital print	± 4 mm	No overlapping

Karton would like to inform you that printing customization are water resistant in normal using conditions which imply only temporary contact with water (please see Storage instruction).

Under no circumstances our company will acknowledge claims or non conformities due to immersion of printed polypropylene articles since this is not a validated and foreseen application for our products.

Suggested product use

We do recommend to process EPLAK® sheets at temperatures included between 5°C and 30°C. Please allow EPLAK® to reach a uniform temperature of at least 15°C in each point prior to proceeding to any further processing.

Regulatory Requirement

- Regulation 1907/2006/CE of 18th December 2006 (REACH and subsequent amendments).
- Safety data sheet: this product is not included in the group of substances for which it is necessary to issue the product safety data sheet (Reg. 1907/2006/CE).
- Directive 94/62/CE regarding heavy metal content.
- Food contact compliance in accordance to Ministerial Decree 21.03.1973 and further amendments and Reg. 10/2011 and further amendments (upon request prior to obtain a commercial offer).

Storage instruction

The product will be supplied with a standard packaging: wooden pallet stretched with film, strapped, corner protectors. We advise to not superimpose the pallets.

Please note that our standard packaging is not to be considered as "waterproof". The Customer can request specific and customized waterproof packaging (with quotation). This risk assessment remains a specific responsibility of the end customer.

Whenever material must be stored/used outdoors we do recommend to follow strictly the following advices:

- Strictly avoid stagnant water to stay over prints for prolonged time;
- Avoid storing outdoors material that is laying horizontally exposed to rainfall without adequate protection;
- Store the material vertically, in order to allow proper water drainage and dry out prior to safe use;
- Please remember always to protect the material with adequate waterproof protections such as PE film or similar.

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Recyclability

Polypropylene sheets, as supplied by Karton S.p.A., are made up of a thermoplastic polyolefin 100% recyclable, via thermomechanical processes. The symbol associated to these products is 05 (PP), according to the dispositions of the Association of Plastic Industry (API).



Technical basic supply conditions

- Colour and finish are specifications mutually agreed with the Customer through approval of a reference sample.
- Regulatory compliance regarding specific legislation (i.e. food contact, toys compliance or others), can only be accomplished if requested by the Customer prior to obtain an offer. Only In this case it will be possible to issue a Declaration of Conformity for the related issue.
- Selling units: Sheets are intended to be sold in number of units. Possible requests in volume (Kg) are converted into pieces
- Please retain pallet label for traceability and product identification purposes.
- All the manufacturing operations and quality controls on the product are being performed at ambient temperature.

Please note that information in this document regards the product as commercialized by Karton Spa and consequently the Company cannot be held liable for any further treatment, handling or processing performed by the Customer. Karton might make changes and / or improvements to the product without prior notice, provided the characteristics detailed in the information data sheet, in the declarations of conformity and its functionality in gluing, cutting, printing, die-cutting and welding processes are guaranteed. If the processes applied to the product are different from those listed above, we kindly ask you to notify Karton SPA in order to share your needs and design a customized product.

Please note that it is a responsibility of the end user to verify that the products are suitable for the intended use in compliance with applicable European Legislation and to verify that the products are fit for the intended technological use.

Design and validation of final articles, specific appropriateness for the end use, specific risk assessment and behaviour of this product after use and in specific conditions that are not described into this document, all must be considered intellectual property and specific responsibility of the Customer.

- (*) For further information and for any special requests:
Please contact Karton's sales office at number + 39 0434 788811