

	PRODUCT DATA SHEET		No. PP/01/04 PO/GP <i>eng.</i>
	Polyolefin sheets HDPE sheets with UV protection (polyethylene sheets of high density polyethylene UV stabilized)		Edition: 1.00
			Edition date: <i>26.01.2018</i>
			Page: 1 No. of Pages: 5
			Copy No.

1. Use
Playground elements, e.g. seats, roofs, etc.
2. Requirements.
Agreements with customer.
3. Certificates, decisions, etc.
None

4. Technical Parameters

4.1 Technical Parameters of extruded sheet

No.	Parameters	Unit of measurement	Ratio	Test method
1	Types		Double sided embossed solid sheets (orange peel/sand)	Visually
2	Colours*		Single-layer (one-coloured) or three-layered (outer layers the same colour with a thickness of - 1.5mm middle layer in a different colour)	Visually
2	Tolerance, thickness range: a) in the range of 10,0 mm b) in the range of 10,1 + 13,0 mm c) in the range of 13,1 + 15,0 mm	mm	a) + 0,2 b) + 0,3 c) + 0,4	Micrometer screw
3	Tolerance, width range: 1220 + 1500 mm	%	1	Metric tape
4	Tolerance, length range 2440 + 3000 mm	%	1	Metric tape
5	Vicat softening temperature, at least (load 10 N / 50°C/h)	°C	110	PN-EN ISO 306

	PRODUCT DATA SHEET		No. PP/01/04
	Polyolefin sheets HDPE sheets with UV protection (polyethylene sheets of high density polyethylene UV stabilized)		PO/GP <i>eng.</i>
			Edition: 1.00
			Edition date: <i>24.01.2018</i>
			Page: 2 No. of pages: 5
			Copy No.

*Standard colour palette :

-blue close to RAL 5015

-yellow close to RAL 1023

-red close to RAL3020

-green close to Pantone 360C

-orange close to Pantone 021 C

Note: on the product it is allowed to deviate flatness of the panel up to 20mm (measured on a single panel).

4.2 Other Technical Parameters of board

No.	Parameters	Unit of measurement	Ratio**	Test method
1	Density	g/cm ³	0,96	ISO 1183-1
Mechanical properties				
2	Tensile stress at Yield	MPa	25	PN-EN ISO 527
3	Tensile strain at Break	%	12	PN-EN ISO 527
4	Resistance to breakage	MPa	15	PN-EN ISO 527
5	Elongation at break	%	750	PN-EN ISO 527
6	Charpy impact strength, in 23 °	kJ/m ²	160	PN-EN ISO 179
7	Charpy notched impact strenght , in 23 °	kJ/m ²	18	PN-EN ISO 179
8	Shore D Hardness	°Sh D	64	ISO 868
9	Brinell Hardness	MPa	57	ISO 2039-1
Thermal properties				
10	Heat deflection temperature (0,45 MPa	°C	68	ISO 75
11	Melting point	°C	133	ISO 11357-1,3
12	Linear coefficient of thermal expansion	10 ⁻⁵ /K	14	Own method

	PRODUCT DATA SHEET		No. PP/01/04
			PO/GP <i>eng.</i>
			Edition: 1.00
			Edition date: <i>24.01.2018</i>
			Page: 3
			No. of Pages : 5
			Copy No.

** the above values are typical values but can not be treated as a product specification. The mechanical properties of the panel were determined from extruded panels with a thickness of 4mm.

5. Wrapping

The boards are placed on pallets, coated with PE or PP foil and pulled by steel or plastic tape. Other packaging is permitted in agreement with the customer.

6. Storage and transport

The boards are stored in dry, closed rooms at a distance of not less than 1m from heating appliances in operation.

The boards are transported by covered means of transport in accordance with the transport regulations.

The boards must be laid in such a way that they are protected against movement and damage during transport.

When storing, care should be taken to ensure that the storage space is flat, as uneven surfaces may cause permanent deformation (bending) of the stored boards.

7. Additional information

Boards are manufactured in standard colour palette (colour close to RAL scale (TYPE K7) or Pantone in visual assessment). In case of specific requirements, the choice of colour should be agreed on individually.

Boards are produced of raw materials and additives that have authorization of manufacturers to come into contact with food and that meet the requirements of REACH 1907/2006 and Directive 94/62/EC. Boards are produced with the addition of UV stabilizer retarding the degradation of a board under the influence of atmospheric conditions and solar radiation in the conditions of insolation as for Poland for the period of approx. 2 years or longer, depending on client's requirements. The advantages of the board include the lack of water absorptivity, ease of cleaning the surface, it can be processed (milled) with tools designed for wood processing. Attention should be paid to the property of the material of which the board is made, meaning the change of length of the board under the influence of temperature (linear, thermal expansion coefficient). This effect is shown in appendix no. 1. The effect of expansion should be taken into account when doing the fixings of structures made with the use of boards. Expansion for the same kind of board, but made in dark colour is higher than for a board made in light colour.

	PRODUCT DATA SHEET		No. PP/01/04 PO/GP ^{eng.}
	Polyolefin sheets HDPE sheets with UV protection (polyethylene sheets of high density polyethylene UV stabilized)		Edition: 1.00
			Edition date: 24.01.2018
			Page: 4 No. of pages: 5
		Copy No.	

The above information is given in good faith. When using our products, the processor should have them tested. These are particularly important for specific uses. The same applies to technical advice and information provided verbally and in writing. Changes to the card are made on an ongoing basis without prior notice to the customer. At the customer's request, we provide you with up-to-date detailed information.

	Full name	Date	Signature
Developed by:	Ledwoń Rafał	24.01.2018	
Checked by:	Gowarzewski Janusz	24.01.2018	
Approved by: Production and Development Director	Siempińska Joanna	24.01.2018	