

# **TECHNICAL DATA SHEET**

# **KAPA<sup>®</sup>PLAST**

Sheet sizes     mm     As per delivery programme       Sheet width tolerance     mm     ± 1       Sheet length tolerance     mm     ± 1 - 10       Sheet thickness tolerance     mm     ± 0,6       Weight per unit area tolerance     g/m²     ± 10       Tolerance     mm     ± 1.       CORE     mm/m     ± 1       Rigid foam     mm/m     ± 1       Closed cell structure     %     >92       SURFACE     SURFACE     Jastic-coated paperboard with primer finish       Colour value     CIELAB     L*= 95,5   a*= -0,41   b*= +1.02       TechnologicAL VALUES     Singer ger ger ger ger ger ger ger ger ger	DIMENSIONS AND WEIGHT									
Sheet sizes   mm   As per delivery programme     Sheet width tolerance   mm   ± 1     Sheet length tolerance   mm   ± 1 - 10     Sheet length tolerance   mm   ± 0,6     Weight per unit area tolerance   g/m²   ± 10     Tolerance in right angle   mm/m   ± 1     CORE     Rigid foam   Polyurethane grey or white     Closed cell structure   %   >92     SURFACE     Layers   plastic-coated paperboard with primer finish     Colour value   CIELAB   L*= 95,5   a*= -0,41   b*= +1.02     TECHNOLOGICAL VALUES     Compression strength at 10% compression   EN ISO 844   MPa   White	Thickness		mm		3	5	10	15	19	
Sheet width tolerancemm $\pm 1$ Sheet length tolerancemm $\pm 1 - 10$ Sheet thickness tolerancemm $\pm 0,6$ Weight per unit area tolerance $g/m^2$ $\pm 10$ Tolerance in right anglemm/m $\pm 1$ CORESURFACELayers $\%$ >92SURFACELayers $Polyurethane grey or whiteColour valueCIELABL^{\pm} 95,5   a^{\pm} - 0,41   b^{\pm} + 1.02TECHNOLOGICAL VALUESCompression strength at10% compressionEN ISO 844MPaMPaWhite0,400,40Grey0,400,400,390,39Gompressive modulusEN ISO 844MPaWhiteWhite6,423,68Bending strengthEN 310N/mm²WhitePAT* (Photographic ActivityTest)ISO 18916Whitepassed$	Weight per unit area	EN 29073-1	g/m²		745	845	1070	1245	1450	
Sheet length tolerancemm $\pm 1 - 10$ Sheet thickness tolerancemm $\pm 0.6$ Weight per unit area toleranceg/m² $\pm 10$ Tolerance in right anglemm/m $\pm 1$ CORERigid foamPolyurethane grey or whiteClosed cell structure%>92SURFACELayersImage: CleLABL*= 95,5   a*= -0,41   b*= +1.02TECHNOLOGICAL VALUESCompression strength at 10% compressionEN ISO 844MPaWhite0.400.390.390.33Compressive modulusEN ISO 844MPaWhite $mm^2$ 7,217,017,55Bending strengthEN 310N/mm²Grey Grey5,687,887,9716,277,55PAT* (Photographic Activity Test)ISO 18916Whitemassed Greymassed1,67PAT* (Photographic Activity Test)ISO 18916Whitepassed1	Sheet sizes		mm	As per delivery programme						
Sheet thickness tolerance     mm     ± 0,6       Weight per unit area tolerance     g/m <sup>2</sup> ± 10       Tolerance in right angle     mm/m     ± 1       CORE       Rigid foam     Polyurethane grey or white       Closed cell structure     %     >92       SURFACE       Layers     Plastic-coated paperboard with primer finish       Colour value     CIELAB     L*= 95,5   a*= -0,41   b*= +1.02       TECHNOLOGICAL VALUES       Compression strength at 10% compression     EN ISO 844     MPa     White 0,40 0,40 0,30 Grey 0,40 0,40 0,39 0,39 0,33 0,33     0,33 0,33       Compression strength at 10% compression     EN ISO 844     MPa     White 0,40 0,40 0,55 Grey 0,40 0,40 0,39 0,39 0,33 0,33     0,33       PH-value     EN ISO 844     MPa     White 0,40 0,40 0,39 0,39 0,33 0,33     0,33       PH-value     ISO 6588     7,76 (Neutral = 7)     7,55 Grey 1,02 6,83 3,25 1,98 1,67     1,67       PH-value     ISO 68916     7,76 (Neutral = 7)     7,76	Sheet width tolerance		mm	±1						
Weight per unit area tolerance     g/m²     ± 10       Tolerance in right angle     mm/m     ± 1       CORE     Polyurethane grey or white       Rigid foam     %     >92       SURFACE     %     >92       SURFACE     %     >92       Layers     plastic-coated paperboard with primer finish       Colour value     CIELAB     L*= 95,5   a*= -0,41   b*= +1.02       TECHNOLOGICAL VALUES     Vhite     0,40     0,40	Sheet length tolerance		mm	± 1 – 10						
tolerance     g/m²     £ 10       Tolerance in right angle     mm/m     ± 1       CORE     mm/m     ± 1       Rigid foam     Polyurethane grey or white        Closed cell structure     %     >92       SURFACE     plastic-coated paperboard with primer finish       Colour value     CIELAB     L*= 95,5   a*= -0,41   b*= +1.02       TECHNOLOGICAL VALUES     MPa     White     0,40     0,40      0,30       Compression strength at 10% compression     EN ISO 844     MPa     White     0,40     0,40      0,32       Compression strength at 10% compression     EN ISO 844     MPa     White      0,40     0,40     0,39     0,33     0,3	Sheet thickness tolerance		mm	± 0,6						
CORE     Polyurethane grey or white       Rigid foam     %     >92       Closed cell structure     %     >92       SURFACE      plastic-coated paperboard with primer finish       Colour value     CIELAB     L*= 95,5   a*= -0,41   b*= +1.02       TECHNOLOGICAL VALUES     Compression strength at 10% compression     EN ISO 844     MPa     White 0,40     0,40     0,30       Compressive modulus     EN ISO 844     MPa     White 7,21     7,01     7,55       Bending strength     EN 310     N/mm <sup>2</sup> White 6,42     3,58     1,67       PH-value     ISO 6588     7,76 (Neutral = 7)      PAT* (Photographic Activity Test)     ISO 18916     White passed			g/m²	± 10						
Rigid foam     Polyurethane grey or white       Closed cell structure     %     >92       SURFACE     plastic-coated paperboard with primer finish       Colour value     CIELAB     L*= 95,5   a*= -0,41   b*= +1.02       TECHNOLOGICAL VALUES     White     0,40     0,40      0,30       Compression strength at 10% compression     EN ISO 844     MPa     White      0,40     0,40      0,32       Compression strength at 10% compression     EN ISO 844     MPa     White      0,40     0,40      0,32       Bending strength     EN ISO 844     MPa     White      7,21     7,01      7,55       Bending strength     EN 310     N/mm²     White      6,42     3,58      1,67       pH-value     ISO 6588     7,76 (Neutral = 7)	Tolerance in right angle		mm/m	±1						
Closed cell structure     %     >92       SURFACE     plastic-coated paperboard with primer finish       Layers     plastic-coated paperboard with primer finish       Colour value     CIELAB     L*= 95,5   a*= -0,41   b*= +1.02       TECHNOLOGICAL VALUES     MPa     White     0,40     0,40      0,30       Compression strength at 10% compression     EN ISO 844     MPa     White      0,40     0,40      0,30       Compressive modulus     EN ISO 844     MPa     White      7,55       Bending strength     EN 310     N/mm²     White      1,627     7,55       PH-value     ISO 6588     7,76 (Neutral = 7)      1,627	CORE									
SURFACE     plastic-coated paperboard with primer finish       Layers     CIELAB     L*= 95,5   a*= -0,41   b*= +1.02       Colour value     CIELAB     L*= 95,5   a*= -0,41   b*= +1.02       TECHNOLOGICAL VALUES       Compression strength at 10% compression     EN ISO 844     MPa     White 0,40     0,40     0,30       Compression strength at 10% compression     EN ISO 844     MPa     White 7,21     7,01     7,55       Grey     0,40     0,40     0,39     0,39     0,30       Compressive modulus     EN ISO 844     MPa     White 7,21     7,01     7,55       Bending strength     EN 310     N/mm²     White 6,42     3,58     1,67       pH-value     ISO 6588     7,76 (Neutral = 7)      1,67       PAT* (Photographic Activity Test)     ISO 18916     White     passed	Rigid foam			Polyurethane grey or white						
Layers   Image: constraint of the image: constraint	Closed cell structure		%	>92						
Colour value   CIELAB   L*= 95,5   a*= -0,41   b*= +1.02     TECHNOLOGICAL VALUES   L*= 95,5   a*= -0,41   b*= +1.02     Compression strength at 10% compression   EN ISO 844   MPa   White   Output   Ou	SURFACE									
Compression strength at 10% compression     EN ISO 844     MPa     White      0,40     0,40      0,30       Compression     EN ISO 844     MPa     White      0,40     0,39     0,39     0,30     0,30     0,39     0,30	Layers			plastic-coated paperboard with primer finish						
Compression strength at 10% compression     EN ISO 844     MPa     White      0,40     0,40      0,30       Compression     EN ISO 844     MPa     White      7,21     7,01      7,55       Compressive modulus     EN ISO 844     MPa     White      7,21     7,01      7,55       Bending strength     EN 310     N/mm²     White      6,42     3,58      1,67       pH-value     ISO 6588     7,76 (N=utral = 7)     11,02     6,83     3,25     1,98     1,67       PAT* (Photographic Activity Test)     ISO 18916     White      6,42     3,58      1,67	Colour value	CIELAB		L*= 95,5   a*= -0,41   b*= +1.02						
Image: Second compression     EN ISO 844     MPa     Grey     0,40     0,39     0,39     0,39     0,30     0,30     0,30     0,30     0,39     0,30     0,30     0,30     0,39     0,30     0,30     0,39     0,30	TECHNOLOGICAL VALUES									
Compressive modulus     EN ISO 844     MPa     White      7,21     7,01      7,55       Bending strength     EN 310     N/mm²     White      6,42     3,58      1,67       pH-value     ISO 6588     7,76 (Neutral = 7)     11,02     6,83     3,25     1,98     1,67       PAT* (Photographic Activity Test)     ISO 18916     White     passed      6       1,67		EN ISO 844	MPa						0,30	
Compressive modulus     EN ISO 844     MPa     Grey     5,58     7,88     7,97     16,27     7,55       Bending strength     EN 310     N/mm²     White      6,42     3,58      1,67       pH-value     ISO 6588     7,76 (Neutral = 7)     7,76 (Neutral = 7)     PAT* (Photographic Activity Test)     ISO 18916     White     passed      6/42     3,58      1,67	•							,		
Bending strength     EN 310     N/mm²     Grey     11,02     6,83     3,25     1,98     1,67       pH-value     ISO 6588     7,76 (Neutral = 7)     7,76 (Neutral = 7)     94 <td>Compressive modulus</td> <td>EN ISO 844</td> <td>МРа</td> <td>Grey</td> <td></td> <td>7,88</td> <td>7,97</td> <td>16,27</td> <td>7,59</td>	Compressive modulus	EN ISO 844	МРа	Grey		7,88	7,97	16,27	7,59	
pH-value ISO 6588 7,76 (N=utral = 7)   PAT* (Photographic Activity Test) ISO 18916 White passed   Grey passed	Bending strength	EN 310	N/mm²						1,67 1,67	
Test) ISO 18916 Grey passed	pH-value	ISO 6588		7,76 (Neutral = 7)						
THERMAL PERFORMANCE		ISO 18916								
	THERMAL PERFORMANCE									
Processing temperature Continuous °C -20 bis 100	Processing temperature	Continuous	°C	-20 bis 100						
Processing temperature Short-term °C Up to 130	Processing temperature	Short-term	°C	Up to 130						

\*IPI Rochester

Note:

The technical data provided here refers to standard values. Actual measured values may vary slightly due to production factors.

3A Composites does not guarantee the accuracy of the data provided and disclaims liability for damages resulting from its use. Values were determined in accordance with the above-mentioned standards, valid at the time of testing.





# **PRODUCT INFORMATION**

## **KAPA<sup>®</sup>PLAST**

Lightweight board with plastic-coated paperboard covering layers. The additional primer finish on the paper layers ensures perfect printing results. KAPA®plast offers an excellent flatness and shows good dimensional stability combined with high rigidity.

#### **Product applications**

- Premium printing substrate for direct digital printing.
- POS/POP Advertising displays.
- Base plate for modelling and presentation.
- 3-D logos / 3-D lettering.
- Exhibition construction, shop window decoration.

#### **Product properties**

- Suitable for manual and industrial cutting.
- The foam is resistant against nearly all solvents and glues.
- The layers can be processed with standard glues and inks.
- High heat and thermal resistance up to 130 ° C (polystyrene starts to melt at 75 ° C).

#### Behaviour in external conditions

- The board is not flame-retardant.
- The foam shows no water absorption.
- The layers are insensitive to water/humidity and wipeable (suitable for short-term outdoor use).

#### Storage - Transport - Handling

- KAPA®plast boards must be stored flat and protected from moisture and cold.
- Before processing, the boards require 24 hours to acclimatise to the processing environment.
- In order to avoid soiling surfaces, clean white cotton gloves should be worn.
- The used raw materials comply with the REACH regulation.
- In the context of the intended application, KAPA® plast sheets are non-hazardous for humans and environment.
- KAPA<sup>®</sup> plast sheets and the cutting waste must be disposed of in accordance with local legislation.

### Availability

Please see our delivery programme for details.

### Additional KAPA® documentation

- Product guide
- Safety data sheet
- Delivery programme
- Processing information
- Quality management certification: DIN ISO 9001:2015, DIN ISO 14001:2015, DIN ISO 45001:2018, DIN ISO 50001:2018
- **REACH** compliance documents

