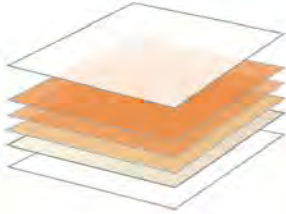


Foopak PE Board (SL)

Is white-back poly coated board designed as direct contact / primary food packaging applications which extra protection to the food is required and combining the capabilities to keep in fridge condition.



| PE LAMINATING | |
|----------------|------------------|
| DOUBLE COATING | Min 20 gsm Blade |
| TOP LAYER | NBKP + LBKP |
| UNDER LAYER | BCTMP |
| FILLER LAYER | BCTMP |
| BACK LAYER | NBKP + LBKP |
| PE LAMINATING | |

TECHNICAL DATA SHEET / PRODUCT SPECIFICATION

| GRAMMAGE (g/m ²) T 410 om - 02 | Caliper (pt) | Thickness (µm) ISO 534 : 1988 (E) | STIFFNESS TABER 15° (T 489 om - 04) | |
|--|--------------|--------------------------------------|--|------------|
| | | | MD (gf.cm) | CD (gf.cm) |
| 230 ± 4 % | 13.8 ± 0.6 | 350 ± 14 | 121 | 61 |
| 245 ± 4 % | 15.0 ± 0.6 | 380 ± 15 | 149 | 83 |
| 280 ± 4 % | 17.7 ± 0.7 | 450 ± 18 | 220 | 116 |
| 305 ± 4 % | 19.7 ± 0.8 | 500 ± 20 | 275 | 149 |
| 330 ± 4 % | 21.7 ± 0.9 | 550 ± 22 | 330 | 176 |

Tolerance for stiffness : ± 10%

| | | |
|------------------|---|---------|
| Moisture Content | % | 6.0 ± 1 |
|------------------|---|---------|

T 412 om - 02

| | | |
|-----------|-----|--------------|
| Roughness | Top | 1.0 - 1.8 µm |
|-----------|-----|--------------|

PPS (Mpa) 1555 om - 06

| | | |
|------------|---|--------|
| Brightness | % | 90 ± 1 |
|------------|---|--------|

ISO 2470 - 1977 (E)

| | | |
|------------------------|------------------|---------|
| Internal Bond Strength | J/m ² | Min 120 |
|------------------------|------------------|---------|

SCOTT 562 pm - 00

| | | |
|------------------|--|--|
| Water Absorption | | |
|------------------|--|--|

COBB

T 441 om - 05

Top (60s) 35 - 55 g/m²
 Top (180s) 50 (+10) g/m²
 Back (180s) 50 (+10) g/m²

COATING OPTIONS

- PE substance is available 1 side and 2 side based on customer requirement, with coating range from 10 gsm until 30 gsm.

Available in Matt and Glossy finish.

- PE weight is to be added in baseboard GSM to get final GSM.

OTHER FEATURES

- High Bulk
- Good Stiffness
- Hardsized
- Surface Tension on top side min 38 dyne/cm

APPLICATIONS

Design For Meat, Seafood, Ice Cream Packaging, Hot Rice, Hot Noodles, Take Away, Frozen Packaging, etc.

PE- Coated Kraft Bleached Cup Stock Paper

Technical Data Sheet

| Physical Test | | Test Method Reference | Basis-Weight (g/m ²) | | | | | | | | | | | |
|---|---------|-----------------------|----------------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Kind of Test | | | 150 | 160 | 170 | 180 | 190 | 200 | 210 | 220 | 230 | 240 | 250 | 260 |
| Grammage, g/m ² | | ISO 536 : 2012 | 150 ± 4% | 160 ± 4% | 170 ± 4% | 180 ± 4% | 190 ± 4% | 200 ± 4% | 210 ± 4% | 220 ± 4% | 230 ± 4% | 240 ± 4% | 250 ± 4% | 260 ± 4% |
| Thickness, µm | | ISO 534 : 2011 | 208 ± 5 | 222 ± 6 | 236 ± 6 | 250 ± 6 | 264 ± 6 | 278 ± 6 | 291 ± 6 | 305 ± 7 | 319 ± 7 | 333 ± 7 | 347 ± 7 | 360 ± 7 |
| Smoothness Bekk, sec/10ml | FS | ISO 5627 | ≤ 15 | ≤ 15 | ≤ 15 | ≤ 15 | ≤ 15 | ≤ 15 | ≤ 15 | ≤ 15 | ≤ 15 | ≤ 15 | ≤ 15 | ≤ 15 |
| | WS | | | | | | | | | | | | | |
| Moisture, % | | ISO 287 : 2017 | 6.5 ± 1 | 6.5 ± 1 | 6.5 ± 1 | 6.5 ± 1 | 6.5 ± 1 | 7.0 ± 1 | 7.0 ± 1 | 7.0 ± 1 | 7.0 ± 1 | 7.0 ± 1 | 7.5 ± 1 | 7.5 ± 1 |
| Cobb Size (60 sec), g/m ² | FS | ISO 535 : 2014 | 20 ~ 35 | 20 ~ 35 | 20 ~ 35 | 20 ~ 35 | 20 ~ 35 | 20 ~ 35 | 20 ~ 35 | 20 ~ 35 | 20 ~ 35 | 20 ~ 35 | 20 ~ 35 | 20 ~ 35 |
| | WS | | | | | | | | | | | | | |
| Bending Stiffness, 15 ⁰ (15mm), mN | MD | T566 om-02 | ≥ 320 | ≥ 370 | ≥ 440 | ≥ 545 | ≥ 635 | ≥ 720 | ≥ 760 | ≥ 875 | ≥ 1025 | ≥ 1130 | ≥ 1240 | ≥ 1390 |
| | CD | | ≥ 145 | ≥ 175 | ≥ 205 | ≥ 255 | ≥ 290 | ≥ 330 | ≥ 350 | ≥ 400 | ≥ 480 | ≥ 525 | ≥ 585 | ≥ 655 |
| Tensile, kg/15mm | CD | ISO 1924-2 : 2008 | ≥ 7.8 | ≥ 8.3 | ≥ 8.8 | ≥ 9.4 | ≥ 9.8 | ≥ 10.4 | ≥ 10.9 | ≥ 11.4 | ≥ 12.0 | ≥ 12.5 | ≥ 13.0 | ≥ 13.5 |
| Elongation | CD | T494 om-96 | ≥ 4.5 | ≥ 4.5 | ≥ 4.5 | ≥ 4.5 | ≥ 4.5 | ≥ 4.5 | ≥ 4.5 | ≥ 4.5 | ≥ 4.5 | ≥ 4.5 | ≥ 4.5 | ≥ 4.5 |
| Folding Endurance, times | MD | ISO 5626 : 1993 | ≥ 80 | ≥ 80 | ≥ 80 | ≥ 80 | ≥ 80 | ≥ 80 | ≥ 80 | ≥ 80 | ≥ 80 | ≥ 80 | ≥ 80 | ≥ 80 |
| | CD | | ≥ 50 | ≥ 50 | ≥ 50 | ≥ 50 | ≥ 50 | ≥ 50 | ≥ 50 | ≥ 50 | ≥ 50 | ≥ 50 | ≥ 50 | ≥ 50 |
| Edge Wick, kg/m ² /hr | | | ≤ 1.5 | ≤ 1.5 | ≤ 1.5 | ≤ 1.5 | ≤ 1.5 | ≤ 1.5 | ≤ 1.5 | ≤ 1.5 | ≤ 1.5 | ≤ 1.5 | ≤ 1.5 | ≤ 1.5 |
| Wax Pick, A | | T459 om-93 | ≥ 13 | ≥ 13 | ≥ 13 | ≥ 13 | ≥ 13 | ≥ 13 | ≥ 13 | ≥ 13 | ≥ 13 | ≥ 13 | ≥ 13 | ≥ 13 |
| Internal Bonding, J/m ² | | Huygen Test | ≥ 180 | ≥ 180 | ≥ 180 | ≥ 180 | ≥ 180 | ≥ 180 | ≥ 180 | ≥ 180 | ≥ 180 | ≥ 180 | ≥ 180 | ≥ 180 |
| Surface Tension, Dyne/cm | PE Side | ASTM D2578-09 | > 38 | > 38 | > 38 | > 38 | > 38 | > 38 | > 38 | > 38 | > 38 | > 38 | > 38 | > 38 |

LDPE POLY CONFIGURATIONS

| | | | | |
|---------------------------------|-----|----|----|----|
| LDPE Grammage, g/m ² | ± 2 | 15 | 18 | 20 |
| LDPE Thickness, µm | Min | 12 | 15 | 18 |

* Available in both **single-sided** and **double-sided** PE poly configuration.**Notes : Claims out of TDS are not acceptable**

Mill warrants the product is made as per the stipulated specification and is not liable for any non-performance related to customer's process and end use application

TECHNICAL DATA SHEET

Foopak Natura Cup using certified wood sources, with natural shade, OBA-free, and poly-coated board, our Natura Cup offers strong wicking resistance and good barrier performance, as well as uniform rim formation and superior printability, with hygienic manufacturing standards for food and beverage applications, both hot and cold. This product is designed to prevent any liquid seepage on the cutting side.

PRODUCT SPECIFICATION

| GRAMMAGE T410 om-02 | THICKNESS ISO 5341988 (E) | STIFFNESS 15° T556 om-05 | | | | |
|------------------------|------------------------------|-----------------------------|---------------|-------------|-------------|------|
| | | (g/m ²) | (µm) | (pt) | | |
| | | CD (gf/cm) | MD (gf/cm) | CD (mNm) | MD (mNm) | |
| 190 ± 4% | 265 ± 4% | 10.4 ± 4% | 27 | 66 | 2.6 | 6.5 |
| 210 ± 4% | 295 ± 4% | 11.6 ± 4% | 30 | 83 | 2.9 | 8.1 |
| 230 ± 4% | 320 ± 4% | 12.6 ± 4% | 39 | 95 | 3.8 | 9.3 |
| 240 ± 4% | 325 ± 4% | 12.8 ± 4% | 41 | 105 | 4.0 | 10.3 |
| 260 ± 4% | 360 ± 4% | 14.2 ± 4% | 52 | 123 | 5.1 | 12.1 |
| 270 ± 4% | 375 ± 4% | 14.8 ± 4% | 65 | 143 | 6.4 | 14.0 |
| 280 ± 4% | 385 ± 4% | 15.2 ± 4% | 69 | 154 | 6.8 | 15.1 |
| 300 ± 4% | 415 ± 4% | 16.3 ± 4% | 80 | 187 | 7.8 | 18.4 |

Tolerance for stiffness ± 10%

| PROPERTY, UNIT | METHOD | SIDE | VALUES |
|--|--------------------|--------------------------------------|-----------|
| Moisture Content, % | T 412 om-02 | | 7.5 ± 1.0 |
| Brightness, % | ISO 2470 - 1 | TOP | Min 80.0 |
| | | BACK | Min 80.0 |
| Internal Bonding, J/m ² | T 569 pm-00, SCOTT | | Min 150 |
| Water Absorption Cobb (180sec), g/m ² | T 441 om-04 | TOP | Max 70 |
| Edge Wick, kg/m ² | Internal Mill | Lactic Acid 1%, 1 Hours | Max 1.6 |
| Edge Wick, mm | Internal Mill | Hot Water 95° C, 10 Minutes | Max 5 |
| Dirt Spot, m ² | T 537 om-02 | Spot Size, mm ² 0.1 - 0.3 | Max 60 |
| | | Spot Size, mm ² 0.3 - 1.5 | Max 10 |
| | | Spot Size, mm ² > 1.5 | Max 0 |
| Surface Tension, Dyne/cm | ASTM D2578-09 | PE Side | Min 38 |

*) Testing is done when production finished at room condition, Temp (°C) : 23 ± 1 and RH (%) : 50 ± 2

LDPE POLY CONFIGURATIONS

| GSM, gram/m ² | ± 2 | 15 | 18 | 20 | 22 | 24 |
|--------------------------|-----|----|----|----|----|----|
| THICKNESS, µm | Min | 12 | 15 | 18 | 20 | 22 |

- * Available in both [FS] single-sided and [FZ] double-sided poly configuration, in choice of gloss or matte finish.
- * Surface treatment is normally applied for improvement printability, customer may make special request for no treatment.
- * PE coated weight and thickness is to be added in baseboard to get final

APPLICATION USES

- * 1/s PE for hot cup application : Hot Beverage, Noodle, Soup Cups, Food Bucket
- * 2/s PE for cold cup application : Cold Beverage, Ice Cream, Yoghurt Cup

RECOMMENDED PRINTING METHODS

- * Offset lithographic
- * Flexographic

*) Remarks: recommended to seek further technical advice and support from the ink vendors in term of the quality compliance between printing inks, printing methods and its paperboard.