

# TECHNICAL DATA SHEET

## UPM Euca

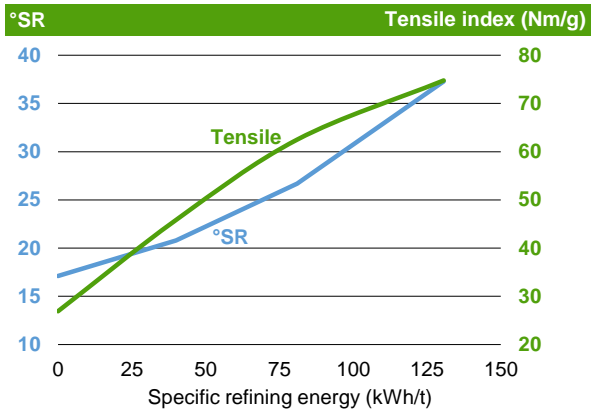
ECF Bleached Eucalyptus Kraft Pulp  
Pulp mill: UPM Fray Bentos

Date of issue: 21.11.2017

### PULP CHARACTERISTICS

|   | Typical value | Spec           |
|---|---------------|----------------|
| Brightness, ISO %<br>ISO 2470-1; ISO 3688 handsheet | <b>90</b>     | <b>≥ 89</b>    |
| Impurities, mm <sup>2</sup> /kg<br>ISO 5350         | <b>1</b>      |                |
| Extractives<br>SCAN-CM 49:93                        | <b>0,1</b>    | <b>≤ 0,2</b>   |
| Ash content<br>ISO 1762                             | <b>0,5</b>    | <b>≤ 0,7</b>   |
| pH<br>ISO 6588                                      | <b>6</b>      | <b>5,0-7,0</b> |

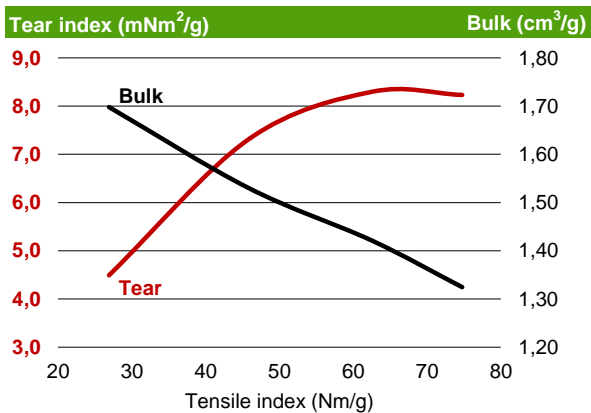
### REFINABILITY



### FIBRE CHARACTERISTICS

|                               | Typical value |
|-------------------------------|---------------|
| Fibre length, mm<br>Metso FS5 | <b>0,9</b>    |
| Coarseness, mg/m<br>Metso FS5 | <b>0,06</b>   |

### TEAR AND BULK AT TENSILE



### RAW MATERIAL

#### Hardwood

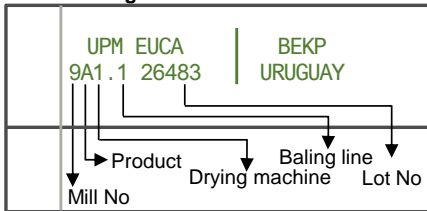
Eucalyptus 100%  
E. grandis, dunnii, globulus, maidenii

| Specific Refining Energy | CSF | SR number | Tensile index | Stiffness index | Tear index          | Scott Bond       | Bulk               | Opacity | Air res. Gurley |
|--------------------------|-----|-----------|---------------|-----------------|---------------------|------------------|--------------------|---------|-----------------|
| kWh/t                    | ml  |           | Nm/g          | Nm/g            | mNm <sup>2</sup> /g | J/m <sup>2</sup> | cm <sup>3</sup> /g | %       | s               |
| 0                        | 562 | 17        | 27            | 4,4             | 4,5                 | 106              | 1,70               | 78,5    | 2,1             |
| 40                       | 493 | 21        | 46            | 5,8             | 7,3                 | 224              | 1,53               | 76,2    | 4,0             |
| 81                       | 399 | 27        | 63            | 6,8             | 8,3                 | 385              | 1,42               | 74,4    | 10,5            |
| 131                      | 289 | 37        | 75            | 7,4             | 8,2                 | 660              | 1,32               | 72,6    | 38,3            |
| 32                       | 507 | 20        | 42            | 5,5             | 6,7                 | 200              | 1,56               | 76,7    | 3,5             |
| 69                       | 426 | 25        | 58            | 6               | 8                   | 339              | 1,45               | 74,9    | 8,5             |
| 97                       | 365 | 30        | 66            | 7               | 8                   | 471              | 1,39               | 73,9    | 19              |
| 50                       | 469 | 22        | 50            | 6,0             | 7,6                 | 264              | 1,50               | 75,7    | 5,5             |
| 76                       | 411 | 26        | 60            | 6,6             | 8,1                 | 365              | 1,44               | 74,6    | 9,9             |
| 110                      | 333 | 33        | 70            | 7,1             | 8,2                 | 552              | 1,36               | 73,4    | 26,5            |

Typical values are averages from all mill quality control samples during 2016. They are given in good faith to represent mill performance and do not constitute contractual undertaking. Values in the table are mean (indicative) values from pulp testing with Voith-Sulzer refining, using standard water. Specific Edge Load 0,5 J/m, ISO testing methods (H 50%, 23 °C, 60 g/m<sup>2</sup> sheets).

## UPM Euca

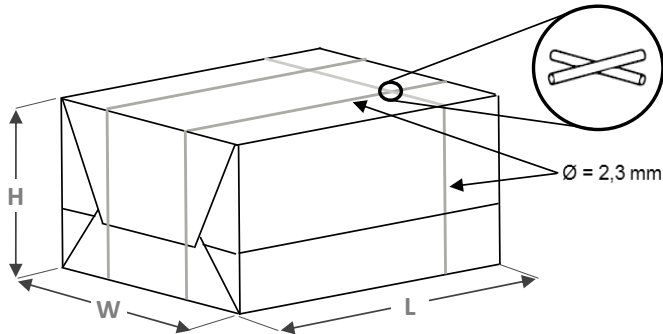
### Bale marking



### Sheets

|                  |                              |
|------------------|------------------------------|
| <b>Size:</b>     | 92 x 67 cm                   |
| <b>Grammage:</b> | 1000 - 1200 g/m <sup>2</sup> |

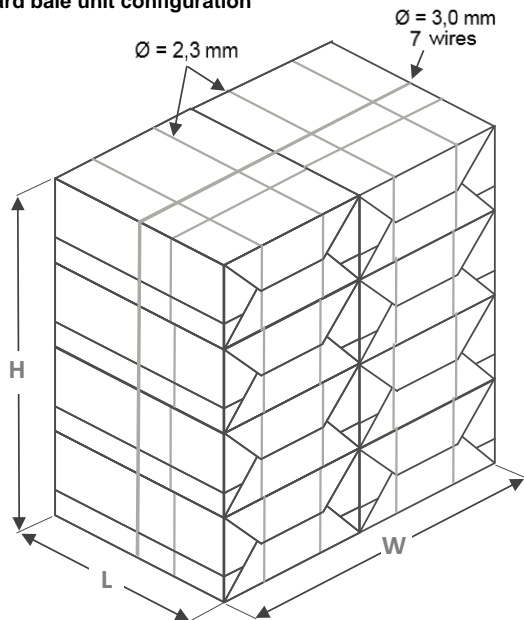
### Standard Bale



### Standard bale

|                  |  |
|------------------|--|
| <b>Size:</b>     | L = 96 cm  |
|                  | W = 69 cm  |
|                  | H = 45 cm  |
| <b>Weight:</b>   | 250 kg   |
| <b>Wrapping:</b> | Pulp sheets (unwrapped on demand)  |
| <b>Markings:</b> | Green watersoluble inkjet printing. Country, company name, product code and bale number on both sides, on every second bale. |
| <b>Wires:</b>    | 3 galvanized wires, diameter 2,3 mm.   |

### Standard bale unit configuration



### Standard unit

|                |                                     |
|----------------|-------------------------------------|
| <b>Size:</b>   | L = 96 cm                           |
|                | W = 139 cm                          |
|                | H = 180 cm                          |
| <b>Weight:</b> | 2000 kg (8x250 kg)                  |
| <b>Wires:</b>  | 7 galvanized wires, diameter 3,0 mm |



### UPM-Kymmene Corporation

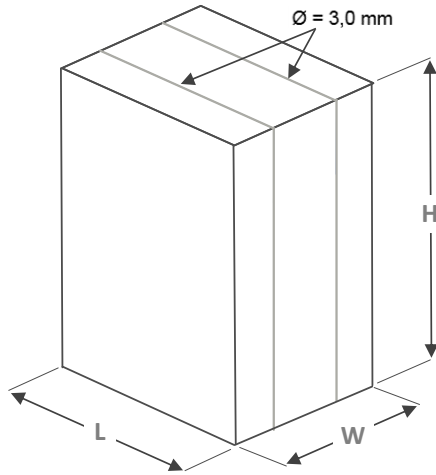
Alvar Aallon katu 1  
PO Box 380  
FI-00101 Helsinki, Finland

### Contact information:

Niklas Keskinen Product Manager, tel. +358 40 585 2781  
niklas.keskinen@upm.com  
www.upmpulp.com

## UPM Euca

### Big bale



#### Sheets

|                  |                              |
|------------------|------------------------------|
| <b>Size:</b>     | 92 x 67 cm                   |
| <b>Grammage:</b> | 1000 - 1200 g/m <sup>2</sup> |

#### Big bale

|              |            |
|--------------|------------|
| <b>Size:</b> | L = 94 cm  |
|              | W = 68 cm  |
|              | H = 180 cm |

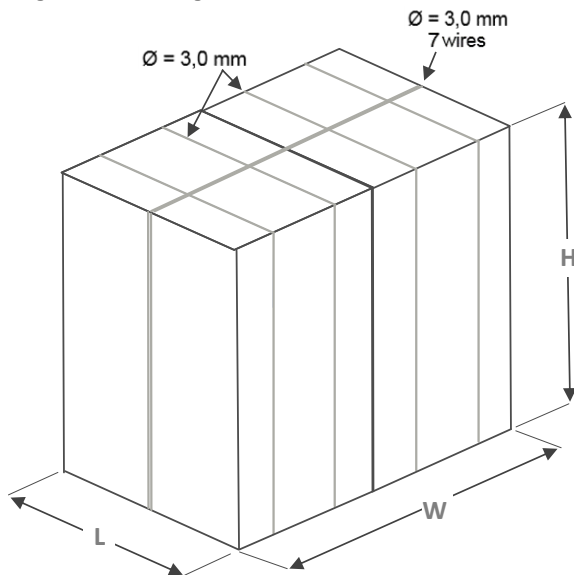
**Weight:** 1000 kg

**Wrapping:** No wrapping

**Markings:** Green watersoluble inkjet printing. Country, company name, product code and bale number on both sides.

**Wires:** 2 galvanized wires, diameter 3,0 mm

### Big bale unit configuration

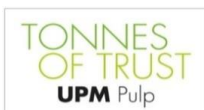


#### Big bale unit

|              |            |
|--------------|------------|
| <b>Size:</b> | L = 94 cm  |
|              | W = 137 cm |
|              | H = 180 cm |

**Weight:** 2000 kg (2x1000 kg)

**Wires:** 7 galvanized wires, diameter 3,0 mm



#### UPM-Kymmene Corporation

Alvar Aallon katu 1  
PO Box 380  
FI-00101 Helsinki, Finland

#### Contact information:

Niklas Keskinen Product Manager, tel. +358 40 585 2781  
niklas.keskinen@upm.com  
www.upmpulp.com