BURSERACEAE (angiosperm)

**Scientific name(s):** Dacryodes pubescens  
Dacryodes heterotricha  
Pachylobus pubescens (synonymous)

**Commercial restriction:** no commercial restriction

### WOOD DESCRIPTION

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Color</td>
<td>light brown</td>
</tr>
<tr>
<td>Sapwood</td>
<td>not clearly demarcated</td>
</tr>
<tr>
<td>Texture</td>
<td>medium</td>
</tr>
<tr>
<td>Grain</td>
<td>interlocked</td>
</tr>
<tr>
<td>Interlocked grain</td>
<td>marked</td>
</tr>
</tbody>
</table>

**Note:** Can be commercialized blended with Ozigo (Dacryodes buettneri).  
Wood pinkish white to light brown. Possible presence of wind shakes.

### LOG DESCRIPTION

- **Diameter:** from 50 to 80 cm
- **Thickness of sapwood:** from 7 to 15 cm
- **Floats:** no
- **Log durability:** moderate (treatment recommended)

### PHYSICAL PROPERTIES

- **Specific gravity:** 0.68 (Mean), 0.05 (Std dev.)

### MECHANICAL AND ACOUSTIC PROPERTIES

- **Crushing strength:** 62 MPa (Mean), 5 MPa (Std dev.)
- **Static bending strength:** 112 MPa (Mean), 16 MPa (Std dev.)
- **Modulus of elasticity:** 16090 MPa (Mean), 1836 MPa (Std dev.)

### NATURAL DURABILITY AND TREATABILITY

Fungi and termite resistance refers to end-uses under temperate climate. Except for special comments on sapwood, natural durability is based on mature heartwood. Sapwood must always be considered as non-durable against wood degrading agents.

**E.N. = Euro Norm**

- **Funghi (according to E.N. standards):** class 4 - poorly durable  
  Dry wood borers: susceptible - sapwood not or slightly demarcated (risk in all the wood)
- **Termites (according to E.N. standards):** class D - durable
- **Treatability (according to E.N. standards):** class 3 - poorly permeable
- **Use class ensured by natural durability:** class 2 - inside or under cover (dampness possible)
- **Species covering the use class 5:** No

### REQUIREMENT OF A PRESERVATIVE TREATMENT

Against dry wood borer attacks: requires appropriate preservative treatment

In case of risk of temporary humidification: requires appropriate preservative treatment

In case of risk of permanent humidification: use not recommended
Drying

Drying rate: normal
Risk of distortion: slight risk
Risk of casehardening: no
Risk of checking: high risk
Risk of collapse: no

Possible drying schedule: 6

<table>
<thead>
<tr>
<th>M.C. (%)</th>
<th>Temperature (°C)</th>
<th>Air humidity (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>dry-bulb</td>
<td>wet-bulb</td>
</tr>
<tr>
<td>Green</td>
<td>42</td>
<td>41</td>
</tr>
<tr>
<td>50</td>
<td>48</td>
<td>43</td>
</tr>
<tr>
<td>30</td>
<td>54</td>
<td>46</td>
</tr>
<tr>
<td>20</td>
<td>60</td>
<td>51</td>
</tr>
<tr>
<td>15</td>
<td>60</td>
<td>51</td>
</tr>
</tbody>
</table>

This schedule is given for information only and is applicable to thickness lower or equal to 38 mm. It must be used in compliance with the code of practice. For thickness from 38 to 75 mm, the air relative humidity should be increased by 5% at each step. For thickness over 75 mm, a 10% increase should be considered.

Sawing and machining

Blunting effect: high
Saw teeth recommended: stellite-tipped
Cutting tools: tungsten carbide
Peeling: good
Slicing: not recommended or without interest

Note: Difficulties in sawing and machining due to interlocked grain and silica content.

Assembling

Nailing / screwing: good
Gluing: correct

Commercial grading

Appearance grading for sawn timbers: According to SATA grading rules (1996)

For the "General Purpose Market":
Possible grading for square edged timbers: choix I, choix II, choix III, choix IV
Possible grading for short length lumbers: choix I, choix II
Possible grading for short length rafters: choix I, choix II, choix III

For the "Special Market":
Possible grading for strips and small boards (ou battens): choix I, choix II, choix III
Possible grading for rafters: choix I, choix II, choix III

FIRE SAFETY

Conventional French grading:
Thickness > 14 mm: M.3 (moderately inflammable)
Thickness < 14 mm: M.4 (easily inflammable)

Euroclasses grading: D s2 d0
Default grading for solid wood, according to requirements of European standard EN 14081-1 annex C (April 2009). It concerns structural graded timber in vertical uses with mean density upper 0.35 and thickness upper 22 mm.

End-uses

Veneer for interior of plywood
Blockboard
Interior joinery
Boxes and crates
Wood frame house
Current furniture or furniture components

Veneer for back or face of plywood
Formwork
Interior panelling
Light carpentry
Flooring
### MAIN LOCAL NAMES

<table>
<thead>
<tr>
<th>Country</th>
<th>Local name</th>
<th>Country</th>
<th>Local name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Angola</td>
<td>SAFOUKALA</td>
<td>Angola</td>
<td>SAFUCALA</td>
</tr>
<tr>
<td>Congo</td>
<td>SAFOUKALA</td>
<td>Congo</td>
<td>SAFUCALA</td>
</tr>
<tr>
<td>Gabon</td>
<td>MOUGANGA</td>
<td>Democratic Republic of the Congo</td>
<td>MOUQUENQUERI</td>
</tr>
<tr>
<td>Democratic Republic of the Congo</td>
<td>N’ SAFU-NKALA</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Specific gravity
- **Very light** (0.2 - 0.3)
- **Light** (0.3 - 0.4)
- **Medium** (0.4 - 0.5)
- **Heavy** (0.5 - 0.6)
- **Very heavy** (0.6 - 0.7)

### Monnin hardness
- **Very soft** (1)
- **Soft** (2 - 3)
- **Medium** (4 - 5)
- **Hard** (6 - 8)
- **Very hard** (8 - 10)

### Coefficient of volumetric shrinkage (%)
- **Low** (0.3 - 0.4)
- **Medium** (0.4 - 0.5)
- **High** (0.5 - 0.6)

### Total tangential shrinkage (%)
- **Low** (4 - 5)
- **Medium** (5 - 6)
- **High** (6 - 7)

### Total radial shrinkage (%)
- **Low** (2 - 3)
- **Medium** (3 - 4)
- **High** (4 - 5)

### Crushing strength (MPa)
- **Low** (10 - 20)
- **Medium** (20 - 30)
- **High** (30 - 40)

### Static bending strength (MPa)
- **Low** (25 - 50)
- **Medium** (50 - 75)
- **High** (75 - 100)

### Modulus of elasticity (≤1000 MPa)
- **Low** (6 - 8)
- **Medium** (8 - 10)
- **High** (10 - 12)

### Resistance to fungi
- **Not durable**
- **Poorly durable**
- **Moderately durable**
- **Durable**
- **Very durable**

### Resistance to dry wood insects borers
- **Susceptible**
- **Durable**

### Resistance to termites
- **Susceptible**
- **Moderately durable**
- **Durable**

### Treatability
- **Not permeable**
- **Poorly permeable**
- **Moderately permeable**
- **Easily permeable**

### Stability
- **Poorly stable**
- **Moderately stable**
- **Stable**

### Fibers Saturation Point
- **15%**
- **25%**
- **35%**
- **45%**