

## Goiabao

Family. Sapotaceae

Botanical Name(s).

*Chrysophyllum lucentifolium*

Continent. Latin America

CITES. This species is not listed in the CITES Appendices (Washington Convention 2023).

### Description of logs

Diameter. From to cm

Thickness of sapwood. -

Floats. No

Log durability. Low (treatment necessary)

### Description of wood

Colour reference. Light yellow

Sapwood. Not demarcated

Texture. Fine

Grain. Straight or interlocked

Interlocked grain. Slight



Flat sawn

Quarter sawn



### Physics and mechanics

*The properties indicated are for mature wood. These properties may vary significantly depending on the origin and growing conditions of the wood.*

Property	Average value
Specific gravity <sup>1</sup>	0.91
Monnin hardness <sup>1</sup>	7.7
Coefficient of volumetric shrinkage	0.65 % per %
Total tangential shrinkage (St)	11.6 %
Total radial shrinkage (Sr)	6.9 %
Ratio St/Sr	1.7
Fibre saturation point	28 %
Thermal conductivity (λ)	0.29 W/(m.K)
Lower heating value	18,940 kJ/kg
Crushing strength <sup>1</sup>	79 MPa
Static bending strength <sup>1</sup>	145 MPa
Modulus of elasticity <sup>1</sup>	20,600 MPa

<sup>1</sup> At 12 % moisture content, with 1 MPa = 1 N/mm

### Natural durability and preservation

Resistance to fungi. Class 4 - poorly durable

Resistance to dry wood borers. Class S - susceptible (risk in all the wood)

Resistance to termites. Class S - susceptible

Treatability. Class 2 - moderately permeable

Use class ensured by natural durability.

Class 1 - inside (no dampness)

### Requirement of a preservative treatment

Against dry wood borer. Requires appropriate preservative treatment

In case of temporary humidification. Requires appropriate preservative treatment

In case of permanent humidification. Use not recommended

### Drying

Drying rate. Normal

Risk of distorsion. High risk

Risk of casehardening. No known specific risk

Risk of checking. Slight risk

Risk of collapse. No known specific risk

Suggested drying program.

Phases	Duration (H)	MC (%) probes	T (°C)	Rh (%)	UGL (%)
<b>Prewarm 1</b>		> 50	40	86	17.0
<b>Prewarm 2</b>	4	> 50	43	85	16.5
<b>Drying</b>		> 50	45	83	15.7
		50 - 40	45	80.0	14.6
		40 - 35	45	77.0	13.8
		35 - 30	45	74.0	12.9
		30 - 27	47	69.0	11.5
		27 - 24	49	61.0	9.9
		24 - 21	50	52.0	8.4
		21 - 18	53	48.0	7.7
		18 - 15	56	41.0	6.6
		15 - 12	59	36.0	5.9
		12 - 9	61	30.0	5.0
		9 - 6	65	29.0	4.7
<b>Conditioning</b>	8		58	(3)	(2)
<b>Cooling</b>	(1)		Stop	(3)	(2)

(1) ) Cooling: until the temperature inside the kiln no longer exceeds external temperature by more than 30 °C.

(2) UGL = final H% x 0,8 to 0,9.

(3) Subtract RH from the UGL determined in (2) and temperature, using the Hailwood-Horrobin equation.

### Sawing and machining

Blunting effect. Fairly high

Sawteeth recommended. Stellite-tipped

Cutting tools. Tungsten carbide

Peeling. Not recommended or without interest

Slicing. Good

## Assembling

**Nailing and screwing.** Good but pre-boring necessary

**Notes.** Risks of splits when nailing or screwing. Pre-boring recommended. High specific gravity: gluing must be especially performed in compliance with the code of practice.

## Commercial grading

**Appearance grading for sawn timbers.**

According to ATIBT grading rules, possible grade: FAS (First And Second), n°1 Common and select, n°2 Common

**Visual grading for structural applications**

No visual grading for structural applications

## Fire safety

**Conventional French grading.**

Thickness > 14 mm: M3 (moderately inflammable)

Thickness < 14 mm: M4 (easily inflammable)

**Euroclasses grading.** D-s2, d0

Default grading for solid wood, according to requirements of European standard EN 14081-1+A1 (August 2019). It concerns structural graded timber in vertical uses and ceiling with mean density upper 0.35 and thickness upper 22 mm.

## End-uses

- Cabinetwork (high class furniture)
- Flooring
- Heavy carpentry
- Interior joinery
- Interior panelling
- Sliced veneer
- Tool handles (resilient woods)
- Turned goods

## Main local names

<b>Country</b>	<b>Local name</b>
Brazil	Abiu casca
Brazil	Abiurana
Brazil	Abiurana amarela
Brazil	Abiurana goiaba
Brazil	Goiabao
Brazil	Goyabao