Family: CALOPHYLLACEAE (angiosperm)

Scientific name(s): Calophyllum brasiliense Commercial restriction: no commercial restriction

#### WOOD DESCRIPTION

## LOG DESCRIPTION

Color: light brown Diameter: from 40 to 100 cm Sapwood: clearly demarcated Thickness of sapwood: from 5 to 7 cm

Texture: medium Floats: no

Grain: interlocked Log durability: moderate (treatment recommended)

Interlocked grain: marked

Note: Heartwood pink light brown with thin darker veins. Sometimes, presence of resin.

#### PHYSICAL PROPERTIES

#### MECHANICAL AND ACOUSTIC PROPERTIES

Physical and mechanical properties are based on mature heartwood specimens. These properties can vary greatly depending on origin and growth conditions.

	<u>Mean</u>	Std dev.	Mean Std dev.
Specific gravity *:	0,65	0,07	Crushing strength *: 58 MPa 7 MPa
Monnin hardness *:	3,0	0,8	Static bending strength *: 94 MPa 11 MPa
Coeff. of volumetric shrinkage:	0,57 %	0,04 %	Modulus of elasticity *: 14840 MPa 1640 MPa
Total tangential shrinkage (TS):	8,1 %	0,7 %	
Total radial shrinkage (RS):	5,5 %	0,6 %	(*: at 12% moisture content, with 1 MPa = 1 N/mm²)
TS/RS ratio:	1,5		
Fiber saturation point:	28 %		Musical quality factor: 137,9 measured at 2728 Hz
Stability:	moderately stable		

# 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.

F.N. = Furo Norm

Funghi (according to E.N. standards): class 2 - durable

Dry wood borers: durable - sapwood demarcated (risk limited to sapwood)

Termites (according to E.N. standards): class S - susceptible

Treatability (according to E.N. standards): class 3 - poorly permeable

Use class ensured by natural durability: class 3 - not in ground contact, outside

Species covering the use class 5: No

Note: Poorly to moderately resistant to termites.

According to the European standard NF EN 335, performance length might be modified by the

intensity of end-use exposition.

## REQUIREMENT OF A PRESERVATIVE TREATMENT

Against dry wood borer attacks: does not require any preservative treatment In case of risk of temporary humidification: does not require any preservative treatment

In case of risk of permanent humidification: use not recommended

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#### **DRYING**

Drying rate: slow
Risk of distortion: high risk
Risk of casehardening: yes
Risk of checking: high risk
Risk of collapse: no

Note: Initial air drying prior to kiln drying and quartersawns

are recommended in order to reduce defects.

## **SAWING AND MACHINING**

Blunting effect: normal

Sawteeth recommended: ordinary or alloy steel

Cutting tools: ordinary
Peeling: good
Slicing: nood

Note: Some difficulties due to interlocked grain. Resin may cloq tools.

#### **ASSEMBLING**

Nailing / screwing: good but pre-boring necessary

Gluing: correct

Note: Tends to split when nailing.

## **COMMERCIAL GRADING**

Appearance grading for sawn timbers: According to NHLA grading rules (January 2007)

Possible grading: FAS, Select, Common 1, Common 2, Common 3

### **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**

Sliced veneer Veneer for interior of plywood

Veneer for back or face of plywood Current furniture or furniture components

Ship building (planking and deck)

Bridges (parts not in contact with water or ground)

Interior panelling

Cooperage

Open boats

Interior joinery

Shingles

Boxes and crates

Flooring

Note: Filling is recommended in order to obtain a good finish. Some of the listed end-uses require a slightly interlocked grain.

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## **MAIN LOCAL NAMES**

Country Local name Country Local name Argentina **JACAREUBA** Belize SANTA MARIA Bolivia CEDRO DO PANTANO BALSA MARIA Brazil Brazil GUANANDI Brazil JACAREUBA Colombia ACEITE CACHICAMO Colombia ACEITE MARIO Colombia MARIO Ecuador BELLA MARIA Ecuador MARIA Guyana KURAHARA Honduras SANTA MARIA Jamaica SANTA MARIA Peru **ALFARO** Peru **JACAREUBA** LAGARTO-CASPI Suriname Peru KURAHARA Venezuela CACHICAMO PALO MARIA Venezuela

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