

Common name:	COPAIBA
Family:	CAESALPINIACEAE
Scientific name(s):	Copaifera duckei Copaifera guianensis Copaifera langsdorffii Copaifera multijuga Copaifera reticulata
Note:	Other species are commercialized under the name COPAIBA.

LOG DESCRIPTION	WOOD DESCRIPTION
Diameter:	from 45 to 80 cm
Thickness of sapwood:	from 2 to 3 cm
Floats:	no
Durability in forest :	Low (must be treated)
	Colour: Red brown
	Sapwood: Clearly demarcated
	Texture: Medium
	Grain: Straight or interlocked
	Interlocked grain: Slight
Note:	Heartwood varies from pink to red brown with copper-coloured veins. Resin exudation. Grain sometimes wavy.

PHYSICAL PROPERTIES	MECHANICAL PROPERTIES			
Physical and mechanical properties are based on mature heartwood specimens. These properties can vary greatly depending on origin and growth conditions.				
	mean	standard deviation	mean	standard deviation
Density *:	0.50 g/cm ³	0.03		
Monnin hardness*:	2.6	1.4	Crushing strength *:	38 MPa
Coef of volumetric shrinkage:	0.40 %	0.03	Static bending strength *:	85 MPa
Total tangential shrinkage:	5.9 %	0.5	Modulus of elasticity *:	12450 MPa
Total radial shrinkage:	3.1 %	0.2		1116
Fibre saturation point:	26 %			
Stability:	Moderately stable to stable		(* : at 12 % moisture content ; 1 MPa = 1 N/mm ²)	

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.

Fungi:	Class 5 - not durable
Dry wood borers:	Durable; sapwood demarcated (risk limited to sapwood)
Termites:	Class S - Susceptible
Treatability:	3 - poorly permeable
Biological hazard class*:	1 - not in ground contact, under cover (no dampness)

* ensured by natural durability (according EN standards).

COUNTRIES - LOCAL NAMES

Countries	Local names
Belize	COPAIBA
Bolivia	COPAIBO
Brazil	COPAIBA
Brazil	PAU-D'OLEO
Colombia	CANIME
French Guiana	PANCHIMOUTI
Guyana	BALSAM
Guyana	MARAM
Panama	CANIVA
Panama	CUPAY
Peru	COPAIBA
Surinam	HOEPELHOUT
Surinam	KOEPALJOEWA
Venezuela	ACEITE
Venezuela	CABIMO

COPAIBA

REQUIREMENT OF A PRESERVATIVE TREATMENT

Against dry wood borer attacks:	Does not require any preservative treatment
In case of temporary humidification risk:	Use not recommended
In case of permanent humidification risk:	Use not recommended

DRYING

Possible drying schedule

Drying rate:	Rapid	Temperature (°C)			Air humidity (%)
		M.C. (%)	dry-bulb	wet-bulb	
Risk of distortion:	No risk or very slight risk	Green	60	56	81
Risk of casehardening:	Yes	30	68	58	61
Risk of checking:	No risk or very slight risk	20	74	60	51
Risk of collapse:	No	15	80	61	41

This schedule is given for information only and is applicable to thickness < 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:	Normal
Sawteeth recommended:	Ordinary or alloy steel
Cutting tools:	Ordinary
Peeling:	Good
Slicing:	Good
Note:	Fuzzy surface. Keep sharp tools.

ASSEMBLING

Nailing / Screwing:	Poor
Gluing:	Correct
Note:	Variable nails holding according to the species.

END-USES

Main known end-uses; they must to be implemented according to the code of practice.

Important remark: some end-uses are mentioned for information (traditional, regional or ancient end-uses).

Interior joinery
Interior panelling
Flooring
Moulding
Turned goods
Boxes and crates
Veneer for interior of plywood
Veneer for back or face of plywood
Light carpentry
Current furniture or furniture components
Sliced veneer
Seats
Fiber or particle boards
Blockboard
Formwork
