

Marupa

Family. Simaroubaceae

Botanical Name(s).

Simarouba amara

Quassia simarouba (synonymous)

Simarouba glauca

Continent. Latin America

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

Description of logs

Diameter. From 50 to 90 cm

Thickness of sapwood. -

Floats. Yes

Log durability. Low (treatment necessary)

Description of wood

Colour reference. Creamy white

Sapwood. Not demarcated

Texture. Coarse

Grain. Straight

Interlocked grain. Absent

Notes. Cream white to light yellow. Sometimes oily veins.

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 ¹	0.41
Monnin hardness ¹	1.1
Coefficient of volumetric shrinkage	0.36 % per %
Total tangential shrinkage (St)	6.3 %
Total radial shrinkage (Sr)	2.8 %
Ratio St/Sr	2.3
Fibre saturation point	32 %
Thermal conductivity (λ)	0.15 W/(m.K)
Lower heating value	19,030 kJ/kg
Crushing strength ¹	34 MPa
Static bending strength ¹	59 MPa
Modulus of elasticity ¹	10,070 MPa

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

Natural durability and preservation



Half-quarter sawn



Quarter sawn

Resistance to fungi. Class 5 - not durable

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

Resistance to termites. Class S - susceptible

Treatability. Class 1 - easily permeable

Use class ensured by natural durability.

Class 1 - inside (no dampness)

Notes. For termite resistance, the class indicated is the result of laboratory tests. In practice, as observed in French Guiana, Marupa wood is not attacked by termites in interior use because it is less appealing than other wood species.

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. Rapid

Risk of distorsion. No risk or very slight risk

Risk of casehardening. No known specific risk

Risk of checking. No risk or very slight risk

Risk of collapse. No known specific risk

Suggested drying program.

Phases	Duration (H)	MC (%) probes	T (°C)	Rh (%)	UGL (%)
Prewarm 1		> 50	55	84	15.5
Prewarm 2	3	> 50	57	83	15.0
Drying		> 50	60	76	12.5
		50 - 40	60	73.0	11.6
		40 - 35	60	69.0	10.7
		35 - 30	60	62.0	9.5
		30 - 27	63	55.0	8.2
		27 - 24	64	50.0	7.5
		24 - 21	65	46.0	6.9
		21 - 18	65	39.0	6.0
		18 - 15	68	32.0	5.0
		15 - 12	70	29.0	4.5
		12 - 9	70	25.0	4.0
		9 - 6	70	24.0	3.9
Conditioning	6		63	(3)	(2)
Cooling	(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. Normal

Sawteeth recommended. Ordinary or alloy steel

Cutting tools. Ordinary

Peeling. Good

Slicing. Good

Assembling

Nailing and screwing. Poor

Commercial grading

Appearance grading for sawn timbers.

According to NHLA grading rules (2015) Possible grading: FAS, Select, Common 1, Common 2, Common 3 In French Guiana, the local name of this species is "Simarouba". Grading is done according to local rules "Bois guyanais classés". Possible grading: choix 1, choix 2, choix 3, choix 4

Visual grading for structural applications

According to French standard NF B 52-001-1 (2018), strength class D18 can be provided by visual grading.

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

- Blockboard
- Boxes and crates
- Current furniture or furniture components
- Fiber or particle boards
- Interior joinery
- Interior panelling
- Matches
- Moulding
- Sliced veneer
- Stringed instruments (sounding board)
- Turned goods
- Veneer for back or face of plywood
- Veneer for interior of plywood
- Wood-ware

Notes. Filling is recommended in order to obtain a good finish.



Kitchen cupboard component - Kourou (French Guiana).

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Main local names

Country	Local name
Bolivia	Chiruana
Brazil	Marupa
Brazil	Marupauba
Brazil	Parahyba
Brazil	Paraiba
Brazil	Tamanqueira
Colombia	Simaruba
Ecuador	Cedro amargo
Ecuador	Cuna
Ecuador	Guitarro
French Guiana	Simarouba
Guyana	Simarupa
Peru	Marupa
Suriname	Soemaroeba
United Kingdom (importated tropical timber)	Bitterwood
Venezuela	Cedro blanco
Venezuela	Simarouba