

Itauba

Family. Lauraceae

Botanical Name(s).

Mezilaurus ita-uba

Mezilaurus lindaviana

Mezilaurus navalium

Mezilaurus p.p.

Continent. Latin America

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

Description of logs

Diameter. From 40 to 80 cm

Thickness of sapwood. From 2 to 5 cm

Floats. No

Log durability. Good

Description of wood

Colour reference. Yellow brown

Sapwood. Not clearly demarcated

Texture. Fine

Grain. Straight

Interlocked grain. Absent

Notes. Oily aspect. The colour varies from yellow brown to dark lustrous brown.

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	0.86
Monnin hardness ¹	5.0
Coefficient of volumetric shrinkage	0.60 % per %
Total tangential shrinkage (St)	9.7 %
Total radial shrinkage (Sr)	3.7 %
Ratio St/Sr	2.6
Fibre saturation point	27 %
Thermal conductivity (λ)	0.28 W/(m.K)
Lower heating value	19,880 kJ/kg
Crushing strength ¹	62 MPa
Static bending strength ¹	125 MPa
Modulus of elasticity ¹	21,020 MPa

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



Flat sawn

Quarter sawn



Natural durability and preservation

Resistance to fungi. Class 1 - very durable

Resistance to dry wood borers. Class D - durable (heartw. durable but sapw. not clearly demarcated)

Resistance to termites. Class D - durable

Treatability. Class 4 - not permeable

Use class ensured by natural durability.

Class 4 - in ground or fresh water contact

Notes. This species is listed in the European standard NF EN 350 (2016). The possible presence of few demarcated sapwood in sawnwoods may have an influence on the expected durability. This species naturally covers the use class 5 (wood permanently or regularly submerged in salt water, sea water or brackish water) due to its high specific gravity and its repulsive extracts content. According to the European standard NF EN 335 (2013), performance length might be modified by the intensity of end-use exposition.

Requirement of a preservative treatment

Against dry wood borer. Requires appropriate preservative treatment

In case of temporary humidification. Does not require any preservative treatment

In case of permanent humidification. Does not require any preservative treatment

Drying

Drying rate. Slow

Risk of distorsion. Slight risk

Risk of casehardening. No known specific risk

Risk of checking. High risk

Risk of collapse. No known specific risk

Notes. Drying must be slow and careful in order to reduce defects.

Suggested drying program.

Phases	Duration (H)	MC (%) probes	T (°C)	Rh (%)	UGL (%)
Prewarm 1		> 50	50	87	17.0
Prewarm 2	4	> 50	50	86	16.5
Drying		> 50	53	85	15.7
		50 - 40	53	82.0	14.6
		40 - 35	54	78.0	13.4
		35 - 30	55	77.0	12.9
		30 - 27	57	73.0	11.9
		27 - 24	58	68.0	10.7
		24 - 21	60	61.0	9.3
		21 - 18	62	52.0	7.9
		18 - 15	64	43.0	6.6
		15 - 12	65	39.0	6.0
		12 - 9	65	31.0	5.0
		9 - 6	65	28.0	4.5
Conditioning	8		58	(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. Fairly high

Sawteeth recommended. Stellite-tipped

Cutting tools. Tungsten carbide

Peeling. Not recommended or without interest

Slicing. Good

Notes. Some difficulties due to interlocked grain.

Assembling

Nailing and screwing. Good but pre-boring necessary

Notes. 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

According to European standard EN 1912 (2012) and associated national standards (see explanatory note), strength class D35 can be provided by visual grading. Strength class D35 can be also provided by visual grading according to French standard NF B 52-001-1 (2018).

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

- Bridges (parts in contact with water or ground)
- Bridges (parts not in contact with water or ground)
- Cabinetwork (high class furniture)
- Current furniture or furniture components
- Exterior joinery
- Exterior panelling
- Flooring
- Heavy carpentry
- Hydraulic works (seawater)
- Indoor staircases
- Interior joinery
- Interior panelling
- Open boats
- Poles
- Seats
- Shingles
- Ship building (planking and deck)
- Ship building (ribs)
- Sleepers
- Sliced veneer
- Turned goods

- Vehicle or container flooring
- Wood frame house



Deck slabs – Ebata Produtos Florestais Ltda, Bélem (Pará, Brazil).
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Main local names

Country	Local name
Brazil	Itauba
Brazil	Louro itauba
French Guiana	Taoub
French Guiana	Taoub jaune
Suriname	Kaneelhout