

Balsamo

Family. Leguminosae (Fabaceae)

Botanical Name(s).

Myroxylon balsamum

Myroxylon toluiferum (synonymous)

Myroxylon peruiferum

Continent. Latin America

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

Description of logs

Diameter. From 50 to 60 cm

Thickness of sapwood. From 4 to 8 cm

Floats. No

Log durability. Good

Description of wood

Colour reference. Red brown

Sapwood. Clearly demarcated

Texture. Fine

Grain. Interlocked

Interlocked grain. Slight

Notes. Sapwood cream white. Heartwood purplish-red to reddish brown darkening on exposure, with stripes of lighter colour. Very fine storeyed structure, perceptible. Sporadic resinous marks. Pleasant slight scent when 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 ¹	0.95
Monnin hardness ¹	10.0
Coefficient of volumetric shrinkage	0.58 % per %
Total tangential shrinkage (St)	8.0 %
Total radial shrinkage (Sr)	4.9 %
Ratio St/Sr	1.6
Fibre saturation point	23 %
Thermal conductivity (λ)	0.31 W/(m.K)
Lower heating value	
Crushing strength ¹	85 MPa
Static bending strength ¹	149 MPa
Modulus of elasticity ¹	20,560 MPa

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



Flat sawn



Quarter sawn

Natural durability and preservation

Resistance to fungi. Class 1-2 - very durable to durable

Resistance to dry wood borers. Class D - durable (sapwood demarcated, risk limited to sapwood)

Resistance to termites. Class D - durable

Treatability. Class 3-4 - poorly or not permeable

Use class ensured by natural durability.

Class 4 - in ground or fresh water contact

Requirement of a preservative treatment

Against dry wood borer. Does not require any 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. Slight risk

Risk of collapse. No known specific risk

Notes.

Suggested drying program.

Phases	Duration (H)	MC (%) probes	T (°C)	Rh (%)	UGL (%)
Prewarm 1		> 50	40	86	17.0
Prewarm 2	4	> 50	43	85	16.5
Drying		> 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
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. Goods results in turnery. Very fine surface after sanding.

Assembling

Nailing and screwing. Good but pre-boring necessary

Notes. Very 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)
- Exterior joinery
- Flooring
- Indoor staircases
- Interior joinery
- Interior panelling
- Moulding
- Ship building
- Sliced veneer
- Turned goods

Notes. Sometimes difficulties with finishing caused by resin. Used medicinally and in perfumery.



Decking (Nature Bois Concept - Tonnay Charente, France)

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Main local names

Country	Local name
Argentina	Incienso
Argentina	Quina-quina
Belgium (importated tropical timber)	Balsam
Brazil	Cabreuva
Brazil	Cabreuva vermelha
Brazil	Oleo vermelho
Colombia	Myroxylon
Ecuador	Sandalo
Honduras	Balsamo
Mexico	Arbol del bálsamo
Mexico	Bálsamo
Paraguay	Incienso
Peru	Bálsamo de Perú
Peru	Bálsamo de tolu
Peru	Estoraque
Peru	Quina-quina