

Agba

Family. Leguminosae (Caesalpiniaceae)

Botanical Name(s).

Gossweilerodendron balsamiferum

Continent. Africa

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

Description of logs

Diameter. From 70 to 110 cm

Thickness of sapwood. From 5 to 10 cm

Floats. Yes

Log durability. Moderate (treatment recommended)

Description of wood

Colour reference. Light brown

Sapwood. Not clearly demarcated

Texture. Medium

Grain. Straight or interlocked

Interlocked grain. Slight

Notes. Possibility of ring shakes or wind shakes in logs. Wood yellow brown to light brown. Resin exudation. Light peppery odour.

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	0.52
Monnin hardness ¹	2.3
Coefficient of volumetric shrinkage	0.33 % per %
Total tangential shrinkage (St)	5.4 %
Total radial shrinkage (Sr)	2.4 %
Ratio St/Sr	2.3
Fibre saturation point	27 %
Thermal conductivity (λ)	0.18 W/(m.K)
Lower heating value	19,260 kJ/kg
Crushing strength ¹	40 MPa
Static bending strength ¹	74 MPa
Modulus of elasticity ¹	10,920 MPa

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

Natural durability and preservation

Resistance to fungi. Class 2 to 3 - durable to moderately durable



Quarter sawn



Flat sawn

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

Resistance to termites. Class S - susceptible

Treatability. Class 3 - poorly permeable

Use class ensured by natural durability.

Class 2 - inside or under cover (dampness possible)

Notes. This species is listed in the European standard NF EN 350 (2016).

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 to normal

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

Notes.

Suggested drying program.

Phases	Duration (H)	MC (%) probes	T (°C)	Rh (%)	UGL (%)
Prewarm 1		> 50	50	86	16.5
Prewarm 2	3	> 50	52	85	16.0
Drying		> 50	55	82	14.7
		50 - 40	55	80.0	13.8
		40 - 35	55	75.0	12.6
		35 - 30	56	73.0	12.0
		30 - 27	58	67.0	10.5
		27 - 24	60	58.0	8.9
		24 - 21	62	50.0	7.5
		21 - 18	64	45.0	6.8
		18 - 15	65	37.0	5.7
		15 - 12	65	34.0	5.3
		12 - 9	65	28.0	4.5
		9 - 6	65	24.0	4.0
Conditioning	6		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. Normal

Sawteeth recommended. Ordinary or alloy steel

Cutting tools. Ordinary

Peeling. Good

Slicing. Good

Notes. Resin tends to clog tools. Sawdust sometimes irritant.

Assembling

Nailing and screwing. Good

Notes. Wood fairly acid: risks of stain when gluing.

Commercial grading

Appearance grading for sawn timbers.

According to the ATIBT grading rules (2017), the main choices are: FAS (First And Second), n°1 Common and select, n°2 Common (see details of these rules on the ATIBT website).

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

- Blockboard
- Boxes and crates
- Current furniture or furniture components
- Exterior joinery
- Exterior panelling
- Formwork
- Glued laminated
- Interior joinery
- Interior panelling
- Light carpentry
- Moulding
- Rolling shutters
- Shingles
- Ship building (planking and deck)
- Sliced veneer
- Veneer for back or face of plywood
- Veneer for interior of plywood
- Wood frame house



Vertical enclosure on a low wall without a guard rail, Teyran (France).

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Main local names

Country	Local name
Angola	Tola branca
Cameroon	Sinedon
Congo	N'tola
Congo	Tola
Congo	Tola blanc
Democratic Republic of the Congo	N'tola
Democratic Republic of the Congo	Tola
Gabon	Agba
Gabon	Émolo
Germany (importated tropical timber)	Agba
Germany (importated tropical timber)	Tola branca
Nigeria	Agba
United Kingdom (importated tropical timber)	Agba