

### **Antiaris**

Family. Moraceae

Botanical Name(s).

Antiaris toxicaria

Antiaris africana (synonymous)

Antiaris welwitschii (synonymous)

Continent. Africa

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

Convention 2023).

**Description of logs** 

Diameter. From 70 to 120 cm

Thickness of sapwood. -

Floats. Yes

Log durability. Low (treatment necessary)

**Description of wood** 

Colour reference. Light yellow Sapwood. Not demarcated

Texture. Medium

Grain. Interlocked

Interlocked grain. Slight

Notes. Heartwood cream white to light yellow.

# **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 <sup>1</sup>	0.47
Monnin hardness <sup>1</sup>	1.5
Coefficient of volumetric shrinkage	0.39 % per %
Total tangential shrinkage (St)	6.9 %
Total radial shrinkage (Sr)	4.0 %
Ratio St/Sr	1.7
Fibre saturation point	35 %
Thermal conductivity (λ)	0.17 W/(m.K)
Lower heating value	17,640 kJ/kg
Crushing strength <sup>1</sup>	36 MPa
Static bending strength <sup>1</sup>	58 MPa
Modulus of elasticity <sup>1</sup>	9,000 MPa

<sup>&</sup>lt;sup>1</sup> At 12 % moisture content, with 1 MPa = 1 N/mm

# **Natural durability and preservation**



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. 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. Normal

Risk of distorsion. High risk

Risk of casehardening. No known specific risk

Risk of checking. Slight risk

Risk of collapse. No known specific risk

Suggested drying program.

Phases	<b>Duration (H)</b>	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)

<sup>(1)</sup> Cooling: until the temperature inside the kiln no longer exceeds external temperature by more than 30 °C.

# Sawing and machining

Blunting effect. Normal

Sawteeth recommended. Ordinary or alloy steel

Cutting tools. Ordinary

<sup>(2)</sup> UGL = final H%  $\times$  0,8 to 0,9.

<sup>(3)</sup> Subtract RH from the UGL determined in (2) and temperature, using the Hailwood-Horrobin equation.





Peeling. Good Slicing. Good

# **Assembling**

Nailing and screwing. Good

# **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
- Fiber or particle boards
- Interior joinery
- Interior panelling
- Moulding
- Rolling shutters
- Sliced veneer
- Veneer for back or face of plywood
- Veneer for interior of plywood
- Wood-ware

Notes. Can be used as substitute for LIMBA (Terminalia superba) or KOTO (Pterygota macrocarpa) for some uses.

### **Main local names**

Country	Local name
Angola	Sansama
Benin	Guxotin
Cameroon	Diolosso
Central African Republic	N'dombou
Congo	Nioumbou
Côte d'Ivoire	Akédé
Côte d'Ivoire	Ako
Democratic Republic of the Congo	Bonkongo
Democratic Republic of the Congo	Bonkonko





Gabon Andoum Germany (importated tropical timber) **Antiaris** Chenchen Ghana Ghana Kyenkyen Nigeria Ogiovu Nigeria Oro Tanzania Mkuzu Tanzania Mlulu Uganda Kirundu Uganda Mumaka United Kingdom (importated tropical timber) Antiaris