

## White sterculia

Family. Malvaceae

Botanical Name(s).

*Eribroma oblonga*

*Sterculia oblonga* (synonymous)

Continent. Africa

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

### Description of logs

Diameter. From 60 to 120 cm

Thickness of sapwood. From 10 to 20 cm

Floats. No

Log durability. Low (treatment necessary)

### Description of wood

Colour reference. Light yellow

Sapwood. Not clearly demarcated

Texture. Medium

Grain. Straight or interlocked

Interlocked grain. Slight

Notes. Wood cream white to light yellow brown with white veins. Large silver figure. Oily to the touch. Unpleasant odour when green.

### 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>	0.74
Monnin hardness <sup>1</sup>	3.7
Coefficient of volumetric shrinkage	0.48 % per %
Total tangential shrinkage (St)	10.6 %
Total radial shrinkage (Sr)	4.6 %
Ratio St/Sr	2.3
Fibre saturation point	34 %
Thermal conductivity (λ)	0.24 W/(m.K)
Lower heating value	
Crushing strength <sup>1</sup>	56 MPa
Static bending strength <sup>1</sup>	100 MPa
Modulus of elasticity <sup>1</sup>	17,110 MPa

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

### Natural durability and preservation



Quarter sawn



Half-quarter sawn

Resistance to fungi. Class 4 - poorly durable

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

Resistance to termites. Class S - susceptible

Treatability. Class 3-4 - poorly or not 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). Prone to blue stain.

## Requirement of a preservative treatment

Against dry wood borer. Requires appropriate preservative treatment

In case of temporary humidification. Use not recommended

In case of permanent humidification. Use not recommended

## Drying

Drying rate. Slow

Risk of distorsion. High risk

Risk of casehardening. No known specific risk

Risk of checking. High risk

Risk of collapse. Yes

Notes. Risks of blue stain.

Suggested drying program.

Phases	Duration (H)	MC (%) probes	T (°C)	Rh (%)	UGL (%)
<b>Prewarm 1</b>		> 50	50	87	17.0
<b>Prewarm 2</b>	4	> 50	50	86	16.5
<b>Drying</b>		> 50	53	83	15.2
		50 - 40	53	80.0	14.1
		40 - 35	54	80.0	13.9
		35 - 30	55	75.0	12.5
		30 - 27	57	70.0	11.0
		27 - 24	58	61.0	9.4
		24 - 21	59	51.0	7.9
		21 - 18	60	47.0	7.3
		18 - 15	61	39.0	6.1
		15 - 12	62	35.0	5.6
		12 - 9	62	30.0	5.0
		9 - 6	62	26.0	4.4
<b>Conditioning</b>	8		55	(3)	(2)
<b>Cooling</b>	(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. Tearing in planing. Difficult finish. Filling is necessary.

### Assembling

Nailing and screwing. Good

Notes. Risks of splits with quartersawn when nailing.

### 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

- Current furniture or furniture components
- Flooring
- Formwork
- Interior joinery
- Interior panelling
- Sliced veneer
- Veneer for back or face of plywood

### Main local names

Country	Local name
Cameroon	Bongélé
Cameroon	Éyong
Central African Republic	Bongo
Congo	Kuil
Côte d'Ivoire	Bi
Equatorial Guinea	N'chong
Equatorial Guinea	N'zong
Gabon	N'chong
Gabon	N'zong
Ghana	Ohaa
Nigeria	Okoko
United Kingdom (importated tropical timber)	White sterculia

United Kingdom (importated tropical timber)

Yellow sterculia