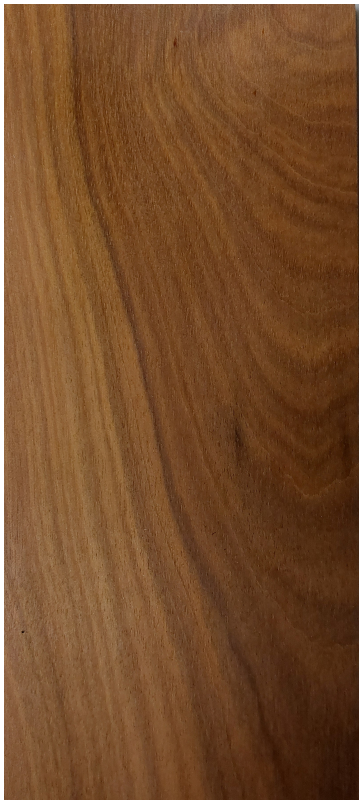
Niove



Flat sawn

Quarter sawn

Family. Myristicaceae

Botanical Name(s).

Staudtia kamerunensis

Continent. Africa

CITES. This species is not listed in the CITES Appendices (Washington Convention 2025).

Description of logs

Diameter. From 50 to 90 cm

Thickness of sapwood. From 8 to 10 cm

Floats. No

Log durability. Good

Description of wood

Colour reference. Orange brown

Sapwood. Clearly demarcated

Texture. Fine

Grain. Straight

Interlocked grain. Absent

Notes. Heartwood orangey yellow brown to red brown with darker veins. Sometimes oily surface. Grain sometimes wavy.

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]	0.88
Monnin hardness[1]	7.5
Coefficient of volumetric shrinkage	0.56 % per %
Total tangential shrinkage (St)	6.0 %
Total radial shrinkage (Sr)	4.6 %
Ratio St/Sr	1.3
Fibre saturation point	24 %
Thermal conductivity (λ)	0.29 W/(m.K)
Lower heating value	19,710 kJ/kg
Crushing strength[1]	88 MPa
Static bending strength[1]	151 MPa
Modulus of elasticity[1]	18,510 MPa

[1] At 12 % moisture content, with 1 MPa = 1 N/mm²

Notes. The specific gravity of green wood is between 1.1 and 1.2.

Natural durability and heartwood treatability

Last update date: 04/26/2025

Resistance of heartwood to xylophagous fungi. Durability class 1 - very durable

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

Resistance of heartwood to termites. Class D - durable

Heartwood treatability. Class 4 - not permeable

Use class ensured by natural durability of heartwood.

Class 4 - in ground or fresh water contact

Notes. This species is listed in the European standard NF EN 350 (2016). Presence of transition wood with a lower durability. 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. 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. High risk

Risk of collapse. No known specific risk

Notes. Must be dried slowly and carefully to avoid pockets moisture. Initial surface drying prior to kiln drying is recommended.

Suggested drying program.

Phases	Duration (H)	MC (%) probes	T (°C)	Rh (%)	UGL (%)
Prewarm 1		> 50	45	86	17.0
Prewarm 2	4	> 50	45	86	16.5
Drying		> 50	48	84	15.7
		50 - 40	48	80.5	14.6
		40 - 35	49	77.0	13.4
		35 - 30	50	75.0	12.9
		30 - 27	51	70.0	11.5
		27 - 24	53	62.0	9.9
		24 - 21	54	53.0	8.4
		21 - 18	55	48.5	7.7
		18 - 15	55	40.0	6.6
		15 - 12	55	35.0	5.9
		12 - 9	60	30.0	5.0
		9 - 6	60	28.0	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

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Blunting effect. Fairly high

Sawteeth recommended. Stellite-tipped

Cutting tools. Tungsten carbide

Peeling. Not recommended or without interest

Slicing. Good

Notes. Requires power.

Assembling

Nailing and screwing. Good but pre-boring necessary

Notes. Tends to split when nailing. High specific gravity: gluing must be especially performed in compliance with the code of practice.

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 on the ATIBT website: https://www.atibt.org/files/upload/technical-publications/Contrats-et-usages-Bois-tropicaux/PAMPHLET-3-MAIN-GRADING-RULES-FOR-SAWN-TROPICAL-TIMBER.pdf).

Visual grading for structural applications

According to French standard NF B 52-001-1 (2018), strength class D50 can be provided by visual grading.

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
- Decking
- Exterior joinery
- Exterior panelling
- Flooring
- Heavy carpentry
- Hydraulic works (fresh water)
- Indoor staircases
- Industrial or heavy flooring
- Interior joinery
- Interior panelling
- Resistant to one or several acids
- Seats
- Ship building (planking and deck)
- Ship building (ribs)
- Sleepers
- Sliced veneer
- Turned goods

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- Vehicle or container flooring

Notes. As the wood presents different colours, it is recommended to discolour the surface.

Stakes for outdoor application in the Netherlands - Compagnie des Bois du Gabon (CBG) - Port-Gentil (Gabon)
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Main local names

Country	Local name
Angola	Menga-menga
Cameroon	M'bonda
Central African Republic	Molanga
Congo (Republic of)	Menga-menga
Democratic Republic of the Congo	Kamashi
Democratic Republic of the Congo	Susumenga
Equatorial Guinea	Bokapi
Gabon	M'boun
Gabon	Niové
Nigeria	Oropa

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