

Family: MYRISTICACEAE (angiosperm)

Scientific name(s): *Virola* spp.

Commercial restriction: no commercial restriction

WOOD DESCRIPTION

Color: light brown
Sapwood: not demarcated
Texture: medium
Grain: straight
Interlocked grain: absent

Note: Logs must be sawn, stored under water or treated right after felling (low durability).

LOG DESCRIPTION

Diameter: from 50 to 90 cm
Thickness of sapwood:
Floats: yes
Log durability: low (must be treated)

PHYSICAL PROPERTIES

Physical and mechanical properties are based on mature heartwood specimens. These properties can vary greatly depending on origin and growth conditions.

	<u>Mean</u>	<u>Std dev.</u>
Specific gravity *:	0,52	0,07
Monnin hardness *:	1,4	0,6
Coeff. of volumetric shrinkage:	0,58 %	0,17 %
Total tangential shrinkage (TS):	9,5 %	1,3 %
Total radial shrinkage (RS):	5,6 %	1,3 %
TS/RS ratio:	1,7	
Fiber saturation point:	34 %	
Stability: poorly stable		

MECHANICAL AND ACOUSTIC PROPERTIES

	<u>Mean</u>	<u>Std dev.</u>
Crushing strength *:	37 MPa	7 MPa
Static bending strength *:	65 MPa	14 MPa
Modulus of elasticity *:	12430 MPa	2691 MPa

(*: at 12% moisture content, with 1 MPa = 1 N/mm²)

Musical quality factor: 84,8 measured at 3133 Hz

NATURAL DURABILITY AND TREATABILITY

Fungi and termite resistance refers to end-uses under temperate climate. Except for special comments on sapwood, natural durability is based on mature heartwood. Sapwood must always be considered as non-durable against wood degrading agents.

E.N. = Euro Norm

Funghi (according to E.N. standards): class 5 - not durable

Dry wood borers: susceptible - sapwood not or slightly demarcated (risk in all the wood)

Termites (according to E.N. standards): class S - susceptible

Treatability (according to E.N. standards): class 1-2 - moderately to easily permeable

Use class ensured by natural durability: class 1 - inside (no dampness)

Species covering the use class 5: No

Note: This species is listed in the European standard NF EN 350-2.

REQUIREMENT OF A PRESERVATIVE TREATMENT

Against dry wood borer attacks: requires appropriate preservative treatment

In case of risk of temporary humidification: requires appropriate preservative treatment

In case of risk of permanent humidification: use not recommended

DRYING

Drying rate: normal to slow

Risk of distortion: high risk

Risk of casehardening: no

Risk of checking: high risk

Risk of collapse: yes

Note: Kiln drying must be handled carefully and slowly in order to reduce defects, especially with thick material.

Possible drying schedule: 2

M.C. (%)	Temperature (°C)		Air humidity (%)
	dry-bulb	wet-bulb	
Green	50	47	84
40	50	45	75
30	55	47	67
20	70	55	47
15	75	58	44

This schedule is given for information only and is applicable to thickness lower or equal to 38 mm.

It must be used in compliance with the code of practice.

For thickness from 38 to 75 mm, the air relative humidity should be increased by 5 % at each step.

For thickness over 75 mm, a 10 % increase should be considered.

SAWING AND MACHINING

Blunting effect: normal

Sawteeth recommended: ordinary or alloy steel

Cutting tools: ordinary

Peeling: good

Slicing: good

Note: Sometimes fuzzy surface.

ASSEMBLING

Nailing / screwing: poor

Gluing: correct

COMMERCIAL GRADING

Appearance grading for sawn timbers: According to NHLA grading rules (January 2007)

Possible grading: FAS, Select, Common 1, Common 2, Common 4

In French Guiana, the local name of this species is "YAYAMADOU". Grading is done according to local rules "Bois guyanais classés".

Possible grading: Choix 1, choix 2, choix 3, choix 4

FIRE SAFETY

Conventional French grading: Thickness > 14 mm : M.3 (moderately inflammable)

Thickness < 14 mm : M.4 (easily inflammable)

Euroclasses grading: D s2 d0

Default grading for solid wood, according to requirements of European standard EN 14081-1 annex C (April 2009). It concerns structural graded timber in vertical uses with mean density upper 0.35 and thickness upper 22 mm.

END-USES

Veneer for interior of plywood

Moulding

Boxes and crates

Shingles

Light carpentry

Interior joinery

Glued laminated

Blockboard

Cigar boxes

Note: Substitute for OKOUME (*Aucoumea klaineana*) or ILOMBA (*Pycnanthus angolensis*) for plywood.

Veneer for back or face of plywood

Current furniture or furniture components

Formwork

Wood-ware

Matches

Interior panelling

Fiber or particle boards

Sliced veneer

Pulp

MAIN LOCAL NAMES

<u>Country</u>	<u>Local name</u>	<u>Country</u>	<u>Local name</u>
Brazil	UCUUBA	Brazil	VIROLA
Colombia	NUANAMO	Colombia	SEBO
Ecuador	CHALIVIANDE	Ecuador	SHEMPO
Guyana	DALLI	French Guiana	MOULOMBA
French Guiana	YAYAMADOU	French Guiana	YAYAMADOU MARECAGE
French Guiana	YAYAMADOU MONTAGNE	Honduras	BANAK
Peru	CUMALA	Suriname	BABOEN
Suriname	PINTRI	Trinidad and Tobago	CAJUEA
Venezuela	CAMATICARO	Venezuela	CUAJO
Venezuela	OTIVO	Venezuela	SANGRINO
Venezuela	VIROLA	United Kingdom	DALLI

