

Common name:	TCHITOLA
Family:	CAESALPINIACEAE
Scientific name(s):	Oxystigma oxyphyllum Pterygopodium oxyphyllum (synonymous) Oxystigma mannii

LOG DESCRIPTION		WOOD DESCRIPTION	
Diameter:	from 70 to 120 cm	Colour:	Red brown
Thickness of sapwood:	from 6 to 10 cm	Sapwood:	Clearly demarcated
Floats:	yes	Texture:	Coarse
Durability in forest :	Moderate (treatment recommended)	Grain:	Straight or interlocked
Note:	Some logs are not floatable. Heartwood copper red brown with blackish veins. Blackish resin exudation.	Interlocked grain:	Slight

PHYSICAL PROPERTIES			MECHANICAL PROPERTIES		
Physical and mechanical properties are based on mature heartwood specimens. These properties can vary greatly depending on origin and growth conditions.					
	mean	standard deviation		mean	standard deviation
Density *:	0.64 g/cm ³	0.03	Crushing strength *:	58 MPa	6
Monnin hardness*:	2.9	0.4	Static bending strength *:	88 MPa	13
Coef of volumetric shrinkage:	0.45 %	0.04	Modulus of elasticity *:	14960 MPa	950
Total tangential shrinkage:	7.5 %	0.6			
Total radial shrinkage:	3.9 %	0.5			
Fibre saturation point:	28 %				
Stability:	stable		(* : at 12 % moisture content ; 1 MPa = 1 N/mm ²)		

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.

Fungi:	Class 3 moderately durable	* ensured by natural durability (according EN standards).
Dry wood borers:	Durable; sapwood demarcated (risk limited to sapwood)	
Termites:	Class M - Moderately durable	
Treatability:	3-4 - poorly or not permeable	
Use class*:	2 - inside or under cover (dampness possible)	
Note:	This species is listed in the European standard NF EN 350-2.	

MAIN LOCAL NAMES

Countries	Local names
Angola	TOLA CHINFUTA
Congo	KITOLA
Congo	TCHITOLA
Dem Rep of Congo	AKWAKWA
Dem Rep of Congo	TSHIBUDIMBU
Gabon	EMOLA
Gabon	M'BABOU
Nigeria	LOLAGBOLA

TCHITOLA

REQUIREMENT OF A PRESERVATIVE TREATMENT

Against dry wood borer attacks:	Does not require any preservative treatment
In case of temporary humidification risk:	Requires appropriate preservative treatment
In case of permanent humidification risk:	Use not recommended

DRYING

Possible drying schedule

Drying rate:	Normal	Temperature (°C)			Air humidity (%)
		M.C. (%)	dry-bulb	wet-bulb	
Risk of distortion:	Slight risk	Green	50	47	84
Risk of casehardening:	No	40	50	45	75
Risk of checking:	Slight risk	30	55	47	67
Risk of collapse:	No	20	70	55	47
		15	75	58	44

This schedule is given for information only and is applicable to thickness < 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:	Resin tends to clog tools. Irritant sawdust.

ASSEMBLING

Nailing / Screwing:	Good
Gluing:	Correct
Note:	Gluing requires care due to resin exudation.

END-USES

Main known end-uses; they must to be implemented according to the code of practice.

Important remark: some end-uses are mentionned for information (traditional, regional or ancient end-uses).

Note:	Due to the presence of resin, it is often used painted. Wood from less resinous logs can be used as a substitute for WALNUT (<i>Juglans</i> spp.).
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Veneer for interior of plywood

Veneer for back or face of plywood

Blockboard

Exterior joinery

Interior joinery

Exterior panelling

Current furniture or furniture components

Sliced veneer

Boxes and crates

Light carpentry

Glued laminated

Wood frame house

Shingles

Fiber or particle boards

Formwork
