Common name:	GHEOMBI
Family:	CAESALPINIACEAE
Scientific name(s):	Sindoropsis letestui
	Copaifera letestui (synonymous)

LOG DESCRIPTION

Diameter:	from 70 to 100 cm
Thickness of sapwood:	from 8 to 10 cm
Floats:	no
Durability in forest :	Moderate (treatment recommended)
Note:	Wood pink brown with coppèr glints, darkening with light. Possible presence of wind shakes. Resin canals mainly in sapwood.

WOOD DESCRIPTION

Colour:	Pinkish brown
Sapwood:	Clearly demarcated
Texture:	Medium
Grain:	Straight or interlocked
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
Density *:	0.72 g/cm3	0.07
Monnin hardness*:	5.4	1.9
Coef of volumetric shrinkage:	0.55 %	0.17
Total tangential shrinkage:	6.8 %	1.1
Total radial shrinkage:	3.7 %	0.7
Fibre saturation point:	22 %	
Stability:	stable	

	mean	standard deviation
Crushing strength *:	61 MPa	6
Static bending strength *:	115 MPa	2
Modulus of elasticity *:	18640 MPa	3944

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

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
Dry wood borers:	Durable; sapwood demarcated (risk limited to sapwood)
Termites:	Class M - Moderately durable
Treatability:	2 - moderately permeable
Use class*:	2 - inside or under cover (dampness possible)

* ensured by natural durability (according EN standards).

MAIN LOCAL NAMES

Countries	Local names
Cameroon	LUMBANDJII
Gabon	GHEOMBI
Gabon	NGOM

GHEOMBI

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

Drying rate:	Slow
Risk of distortion:	High risk
Risk of casehardening:	No
Risk of checking:	Slight risk
Risk of collapse:	No

Possible drying schedule

M.C. (%)	Temperature (°C) dry-bulb	wet-bulb	Air humidity (%)
Green	42	39	82
50	48	43	74
40	48	43	74
30	48	43	74
15	54	46	63

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:	Fairly high
Sawteeth recommended:	Stellite-tipped
Cutting tools:	Tungsten carbide
Peeling:	Good
Slicing:	Good
Note:	Sometimes clogging of sawblades and tools due to resin. Irregular grain may cause a fuzzy surface in planing.

ASSEMBLING

Nailing / Screwing:	Good
Gluing:	Correct

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:	Low yield due to resin canal and wide sapwood.

Veneer for interior of plywood
Veneer for back or face of plywood
Light carpentry
Wood frame house
Interior joinery
Current furniture or furniture components
Sliced veneer
Flooring
Formwork
Boxes and crates
Exterior joinery