Common name:	ALEP
Family:	IRVINGIACEAE
Scientific name(s):	Desbordesia glaucescens

LOG DESCRIPTION

Diameter:	from 90 to 100 cm
Thickness of sapwood:	from 5 to 8 cm
Floats:	no
Durability in forest :	No information available
Note:	Logs must be sawn quickly after felling (cracks during drying). Wood turns to dark brown with air. Dark veins more or less numerous.

WOOD DESCRIPTION

Colour:	Yellow brown
Sapwood:	Clearly demarcated
Texture:	Fine
Grain:	Straight
Interlocked grain:	Absent

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 *:	1.05 g/cm3	0.05
Monnin hardness*:	10.9	0.8
Coef of volumetric shrinkage:	0.67 %	0.15
Total tangential shrinkage:	10.9 %	0.6
Total radial shrinkage:	6.8 %	0.4
Fibre saturation point:	28 %	
Stability:	Poorly stable	

	mean	standard deviation
Crushing strength *:	80 MPa	15
Static bending strength *:	157 MPa	13
Modulus of elasticity *:	23390 MPa	3350

(* : 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 1 - very durable
Dry wood borers:	Durable; sapwood demarcated (risk limited to sapwood)
Termites:	Class D - Durable
Treatability:	3 - poorly permeable
Biological hazard class*:	4 - in ground or fresh water contact or hight dampness
Note:	Due to its high specific gravity and hardness, this species naturally covers the biological hazard class 5 (end-uses in marine environment and brackish water).

* ensured by natural durability (according EN standards).

COUNTRIES - LOCAL NAMES

Countries	Local names
Cameroon	OMANG
Congo	BENGA
Dem Rep of Congo	BENGA
Gabon	ALEP

ALEP

REQUIREMENT OF A PRESERVATIVE TREATMENT

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

DRYING

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

Possible drying schedule

M.C. (%)	Temperature (°C) dry-bulb	wet-bulb	Air humidity (%)
Green	40	37	82
40	44	38	68
30	44	36	59
20	46	36	52
15	49	37	46

This shedule 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:	Not recommended or without interest
Slicing:	Not recommended or without interest
Note:	Requires power.

ASSEMBLING

Nailing / Screwing:	Good but pre-boring necessary
Gluing:	Correct (for interior only)
Note:	Gluing must be done with care (very dense wood).

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).

Heavy carpentry
Sleepers
Posts
Bridges (parts in contact with water or ground)
Vehicle or container flooring
Hydraulic works (fresh water)
Bridges (parts not in contact with water or ground)