Common name: MOABI

Family: SAPOTACEAE
Scientific name(s): Baillonella toxisperma

Mimusops djave (synonymous)

LOG DESCRIPTION		WOOD DESCRIPTION		
Diameter:	from 60 to 100 cm	Colour:	Red brown	
Thickness of sapwood:	from 4 to 6 cm	Sapwood:	Clearly demarcated	
Floats:	no	Texture:	Fine	
Durability in forest:	Good	Grain:	Straight or interlocked	
		Interlocked grain:	Slight	
Note:	Wood pink brown to red brown more or less dark and finely veined. Satin like aspect on			
	quartersawn.			

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
Density *:	0.87 g/cm ²	3 0.07			deviation
Monnin hardness*:	6.8	1.1	Crushing strength *:	74 MPa	10
Coef of volumetric shrinkage	: 0.64 %	0.01	Static bending strength *:	143 MPa	19
Total tangential shrinkage:	8.7 %		Static bending strength .	143 MIF a	19
Total radial shrinkage:	6.5 %		Modulus of elasticity *:	21040 MPa	2630
Fibre saturation point:	23 %				
Stability:	Poorly stable		(* : 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)

durability (according EN standards).

* ensured by natural

Termites: Class D - Durable

Treatability: 3-4 - poorly or not permeable

Biological hazard class*: 4 - in ground or fresh water contact or hight dampness

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

Due to its high specific gravity and a high silica content, it naturally covers the biological hazard

class 5 (end-uses in marine environment or in brackish water).

COUNTRIES - LOCAL NAMES

Countries	Local names
Angola	MOABI
Cameroon	ADJAP
Cameroon	AYAP
Congo	DIMPAMPI
Congo	MOABI
Dem Rep of Congo	MUAMBA JAUNE
Equatorial Guinea	ADJAP
Equatorial Guinea	AYAP
Gabon	ADZA
Gabon	M'FOI
United Kingdom	AFRICAN PEARWOOD

MOABI

REQUIREMENT OF A PRESERVATIVE TREATMENT

Against dry wood borer attacks: In case of temporary humidification risk: In case of permanent humidification risk:

Does not require any preservative treatment Does not require any preservative treatment Does not require any preservative treatment

DRYING Possible dryi			g schedule			
Drying rate: Risk of distortion: Risk of casehardening: Risk of checking: Risk of collapse:	Slow Slight risk No High risk No	M.C. (%)	Tempera dry-bulb	ture (°C) wet-bulb	Air humidity (%)	
		Green 40 30 20 15	50 50 55 70 75	47 45 47 55 58	84 75 67 47 44	

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.

Note: Surface drying under cover. Kiln drying must be handled with care. It is recommended to dry until

a low moisture content (10. 12 %) because of its shrinkage.

SAWING AND MACHINING

Blunting effect: High

Sawteeth recommended: Stellite-tipped Cutting tools: Tungsten carbide

Peeling: Good Slicing: Good

Note: Requires power. Blunting effect fairly high to high (silica). Sawdust can irritate mucous

membranes.

ASSEMBLING

Nailing / Screwing: Good but pre-boring necessary

Gluing:

Note: Tends to split in nailing. Gluing requires care (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).

Note: Substitute for MAKORE (Tieghemella spp.).

Exterior joinery Heavy carpentry

Rolling shutters Bridges (parts not in contact with water or ground)

Interior joinery

Interior panelling

Flooring

Stairs (inside)

Current furniture or furniture components

Sliced veneer

Cabinetwork (high class furniture)

Veneer for interior of plywood

Veneer for back or face of plywood

Sleepers

Turned goods

Arched goods

Sculpture

Industrial or heavy flooring

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