

Family: MYRTACEAE (angiosperm)

Scientific name(s): Syzygium spp.* (voir note)

Eugenia spp.* (voir note)

Commercial restriction: no commercial restriction

Note: * Syzygium spp. and Eugenia spp.: origins Asia-Oceania.

WOOD DESCRIPTION

Color: brown
Sapwood: not clearly demarcated
Texture: fine
Grain: interlocked
Interlocked grain: slight

Note: Wood golden brown, greyish brown or brown with pink or purplish glints. Grain wavy or irregular. Resin deposits.

LOG DESCRIPTION

Diameter: from 40 to 90 cm
Thickness of sapwood: from 1 to 4 cm
Floats: no
Log durability: no information available

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 *: | 0,86 | |
| Monnin hardness *: | 5,6 | |
| Coeff. of volumetric shrinkage: | 0,62 % | |
| Total tangential shrinkage (TS): | 8,7 % | |
| Total radial shrinkage (RS): | 5,3 % | |
| TS/RS ratio: | 1,6 | |
| Fiber saturation point: | 33 % | |
| Stability: | moderately stable | |

Note: Mechanical and physical properties vary according to the species.

MECHANICAL AND ACOUSTIC PROPERTIES

| | <u>Mean</u> | <u>Std dev.</u> |
|---|---------------------------|-----------------|
| Crushing strength *: | 73 MPa | |
| Static bending strength *: | 110 MPa | |
| Modulus of elasticity *: | 15460 MPa | |
| (*: at 12% moisture content, with 1 MPa = 1 N/mm ²) | | |
| Musical quality factor: | 120,4 measured at 2546 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 3 - moderately durable
Dry wood borers: susceptible - sapwood not or slightly demarcated (risk in all the wood)
Termites (according to E.N. standards): class M - moderately durable
Treatability (according to E.N. standards): class 3 - poorly permeable
Use class ensured by natural durability: class 2 - inside or under cover (dampness possible)
Species covering the use class 5: No

Note: Resistance to decay moderate to good.

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: slow

Risk of distortion: high risk

Risk of casehardening: no

Risk of checking: high risk

Risk of collapse: no

Note: Careful drying required. Top weighting of the piles and end-coating are recommended.

SAWING AND MACHINING

Blunting effect: normal

Sawteeth recommended: ordinary or alloy steel

Cutting tools: ordinary

Peeling: not recommended or without interest

Slicing: not recommended or without interest

ASSEMBLING

Nailing / screwing: good but pre-boring necessary

Gluing: correct

Note: Risks of splits when nailing.

COMMERCIAL GRADING

Appearance grading for sawn timbers: According to MGR grading rules (2009)

Possible grading: Prime, Select, Standard, Serviceable, Utility

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

Exterior joinery
Flooring
Heavy carpentry
Tool handles (resilient woods)
Musical instruments

Interior joinery
Vehicle or container flooring
Current furniture or furniture components
Ship building (planking and deck)

MAIN LOCAL NAMES

| <u>Country</u> | <u>Local name</u> | <u>Country</u> | <u>Local name</u> |
|---------------------|-------------------|--------------------|-------------------|
| India | JAMAN | Indonesia | JAMAN |
| Indonesia | JAMBU | Indonesia | JAMUN |
| Indonesia | MERALU | Indonesia | NIR-NAVAL |
| Peninsular Malaysia | OBAR | Malaysia (islands) | BLACK KELAT |
| Malaysia (islands) | COMMON KELAT | Malaysia (islands) | KELAT |
| Myanmar | THABYE | Papua New Guinea | WATER GUM |
| Philippines | MAKASIM | Thailand | CHOMPHU |
| Vietnam | PLONG | Vietnam | TRAM |

