



TECHNICAL SPECIFICATIONS

Common Name	Garapa
Scientific name	<i>Apuleia leiocarpa</i> Macb.
Family	<i>Fabaceae - Caesalpinioideae</i>
Origin	América (Sul)
Main local names	Grapia Amarillo Ibira Pere Almendrillo Ana Mapurite
Other designations	Grapiapunha

DISTRIBUTION

Regions	South America
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WOOD DESCRIPTION

Sapwood	Clearly demarcated	
Heartwood	Color	Yellow
	Texture	Medium
	Grain	Straight or interlocked
	Interlocked grain	marked

PHYSICAL AND MECHANICAL PROPERTIES

DENSITY		kg/m³
Average dried weight	MV	700-900
At 12% relative humidity	MV12	790
LINEAR RETRACTION		%
Tangential	(T%)	8,5
Radial	(R%)	4,4
Axial	(A%)	dnd
Volumetric retraction	(V%)	14
shrinkage coefficient (for 1% less humidity)	(%)	0,55
Anisotropy	(T/R)	1,9
Fiber saturation point	(%)	22
BREACH CONTRACTION		N/mm²
Crushing strength	C12	63
Axial traction	T12	dnd
Static bending strength	F12	116
Modulus of elasticity	E12	15 880
Monnin hardness		6,7 mm⁻¹
Thermal conductivity		0,17 w/m.k
Toughness	Light and soft to medium heavy	

* dnd – dados não disponíveis

PLACEMENT IN WORK AND TRANSFORMATION

Solid wood		
Process:	Observação:	
Sawdust	^	Easy
Drying	^	Easy and fast
Machining	^	Quite easy
Nailing	^	Easy
Gluing	^	Good
Finishing	^	Good

FIRE SAFETY

Euroclasses grading	
D s2 d0	Grading for solid wood, according to requirements of European standard EN 14081-1 anexo C. It concerns structural graded timber in vertical uses with mean density upper 0,35 and thickness upper 22 mm.

NATURAL DURABILITY AND TREATABILITY

Natural durability	
Funghi	Moderately durable (Class 3)
Beetles	Durável (Classe D – risk limited to sapwood)
Termites	Moderately durable (Classe M)
Impregnability	Poorly permeable (Classe 3)
Class of use	Inside or under cover (Classe 2)

END-USES

massive furniture	Veneer	Plywood
footers	frames	glued structures
Carpentry	panels	floors
interior joinery	outdoor joinery	outer coating
light craft	Craftsmanship	tool handles
bodywork	posts	Construction

GENERAL OBSERVATIONS

This wood, for being heavy, of moderate natural durability and of medium high mechanical resistance, is used for different purposes;

The wood has a glossy and smooth surface to the touch; imperceptible smell and taste;

It has good aptitude for gluing, can be nailed or screwed and easily receives paint, varnish and polish. Alkaline glues and ferrous metals stain wood;

Drying can be carried out either in the air or in ovens without great difficulties, provided that the usual precautions are taken to counteract the tendency for cracks and warping, such as good aeration and ventilation of the drying piles and carrying out the operation slowly and avoiding if, at least initially, the temperatures are high.

BIBLIOGRAPHIC REFERENCES

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EN 350 (2016) – Durability of wood and wood-based products - Testing and classification of the durability to biological agents of wood and wood-based materials.
