Common name:	BREU
Family:	BURSERACEAE
Scientific name(s):	Protium spp.

LOG DESCRIPTION

Diameter:	from 40 to 60 cm
Thickness of sapwood:	from to cm
Floats:	yes
Durability in forest :	Low (must be treated)
Note:	Presence of shakes in some logs. Heartwood light brown to pinkish brown.

WOOD DESCRIPTION

Colour:	Light brown
Sapwood:	Not demarcated
Texture:	Medium
Grain:	Straight or interlocked
Interlocked grain:	Slight

PHYSICAL 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 *:	0.64 g/cm3	0.04
Monnin hardness*:	2.7	0.5
Coef of volumetric shrinkage:	0.57 %	0.06
Total tangential shrinkage:	10.0 %	0.6
Total radial shrinkage:	5.5 %	0.4
Fibre saturation point:	28 %	
Stability:	Moderately stable	

MECHANICAL PROPERTIES

	mean	standard deviation
Crushing strength *:	57 MPa	3
Static bending strength *:	85 MPa	13
Modulus of elasticity *:	14350 MPa	510

(* : 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 5 - not durable
Dry wood borers:	Susceptible; sapwood not or slightly demarcated (risk in all the wood)
Termites:	Class S - Susceptible
Treatability:	3 - poorly permeable
Use class*:	1 - inside (no dampness)

* ensured by natural durability (according EN standards).

MAIN LOCAL NAMES

Countries	Local names
Bolivia	CARANO
Brazil	ALMECEGA
Brazil	ARURU
Brazil	BREU
Colombia	ANIME
Colombia	CARANO
Colombia	CURRUCAY
Ecuador	ANIME BLANCO
French Guiana	ENCENS BLANC, GRIS, ROUGE
French Guiana	TINGUIMONI
Guyana	HAIAWA
Guyana	KUROKAY
Guyana	POROKAY
Peru	COPAL-CASPI
Surinam	TINGUIMONI
Venezuela	ANIME
Venezuela	CARANO
Venezuela	AZUCARITO

BREU

REQUIREMENT OF A PRESERVATIVE TREATMENT

Against dry wood borer attacks:	Requires appropriate preservative treatment
In case of temporary humidification risk:	Use not recommended
In case of permanent humidification risk:	Use not recommended

DRYING

Drying rate:	Normal to 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	41	94
50	48	43	74
30	54	46	63
20	60	51	62
15	60	51	62

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.

Note: Drying must be done with care in order to reduce the risks of distortion and prevent the extension of original shakes. Sometimes, risks of casehardening.

SAWING AND MACHINING

Blunting effect:	Fairly high
Sawteeth recommended:	Stellite-tipped
Cutting tools:	Tungsten carbide
Peeling:	Good
Slicing:	Not recommended or without interest
Note:	Logs should be debarked prior to sawing in order to avoid resin accumulation. Blunting effect quite important due to silica.

ASSEMBLING

Nailing / Screwing:	Good but pre-boring necessary
Gluing:	Correct
Note:	Tends to split when nailing.

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).

Veneer for interior of plywood
Veneer for back or face of plywood
Boxes and crates
Current furniture or furniture components
Interior panelling
Formwork
Blockboard
Fiber or particle boards