



CUPIUBA

Source

FSC Cupiuba is available in the forests of Precious Woods, located in the Amazon region of Brazil. The large trees reach diameters till about 1,2 m and attain heights of 40 m. The trunk is rather straight to curved. It is possible to produce larger sizes of Cupiuba.

Appearance

The heartwood has a wide color variation from brick-red till yellow brown and darkens slightly after exposure. The lighter colored sapwood is sharply demarcated from the heartwood. Remarkable is the sour smell, which mainly disappears after drying. For interior uses a finish (lacquer) can avoid this smell. It has a medium lustre. The grain is often irregular, sometimes interlocked and the texture is medium fine.

Processing properties

Machining goes relatively easy. With some extra care, interlocked grain can also become smooth. Regarding finishing, good experience is available for interior use. Less experience is available regarding gluing. Pre-drilling is recommended. Drying has to be done carefully because of the high risk of distortion and checking.

Application

Cupiuba is an attractive species with respect to the price/quality ratio. For interior use, it is chosen because of the rich colour variation of the heartwood. Mostly, it is used for bank reinforcement, and garden timber, since for other in-ground uses the durability seems too low.

Technical properties

Green density	1.100 kg/m ³
Density (at 12%)	850 kg/m ³
Shrinkage green – oven dry	4,3% radial; 8,1% tangential
Shrinkage green – 65% RH (abt. 12% EMC)	1,8% radial; 3,5% tangential
Swelling between 50-90% RH	0,9% radial; 2,0% tangential
Equilibrium Moisture Content (EMC)	7,8% (at 65% RH water adsorption) 12,5% (at 65% RH water desorption)
Fibre Saturation Point (FSP)	25%
Durability according to EN 113 (without soil contact)	Heartwood class 2-3
Durability according to EN 350:2016	Heartwood class 3
Bending strength, MOR (defect free samples)	110 N/mm ²
Modulus of elasticity, MOE (defect free samples)	18.190 N/mm ²
Shear strength (defect free samples)	12,2 N/mm ²
Janka hardness	9.928 N (transversal); 9.716 N (parallel)
Strength class (EN 338)	D35 *)
<i>The figures in this table are mainly indicative, unless a specific standard is mentioned, which provides exact figures.</i>	
*) This value is determined by testing of a limited number of full scale samples. A higher value is expected by testing more samples.	

References

This information is based on research (mainly independent) and experience of Precious Woods, (semi-) scientific literature and the (Dutch) Houtvademecum (10th edition 2010).