



Trade Name: **Angelim Pedra**

Other Names: Gueli Kiabici, Darina

Scientific Name: *Hymenolobium flavum*

Family / Famille: *Fabaceae*

**Specie Brief:** A medium-density hardwood, from a very large defect-free tree, making it suitable for large lumber sizes and joinery applications such as window framing.

Wood Description		Physical & Mechanical Properties	
Heartwood Color	<b>Orange yellow</b>	Specific Gravity (kg/m3)*	<b>0.80</b>
Sapwood Color	<b>Not clearly demarcated</b>	Monnin Hardness*	<b>6.3</b>
Texture	<b>Coarse</b>	Crushing Strength*	<b>67 MPa</b>
Grain	<b>Interlocked</b>	Radial Shrinkage	<b>4.90%</b>
Cross Grain	<b>Slight</b>	Tangential Shrinkage	<b>8.30%</b>
Durability	<b>Class 3 - moderately durable</b>	Tangential / Radial Ratio	<b>1.70</b>
Marine Durable	<b>Class 5 - no</b>	<i>* at 12% moisture content</i>	

#### Key Products:

- Joinery
- Railway Sleepers
- Sub-Construction
- Truck Flooring
- Window Framing
- Doors

#### Properties & Characteristics

Angelim Pedra is a medium density and moderately durable hardwood. It comes from one of the largest sized tree species in the Amazon basin so can produce large sized timbers. This makes it suitable for joinery applications that require large sizes such as window and door framing. Freshly sawn, the color of the heartwood is orange yellow brown, darkening to (darker) brown. Irregular dark spots are natural mineral spots or stones 'pedra'. The grain is straight to irregular and often interlocked which can raise if not kiln dried properly. The texture is coarse.

#### Joinery, Windows & Door Framing

Large volumes of Angelim Pedra have been used in Europe for the past 10-20 years as window framing. This is produced from large timbers that are often 3x8" (75x200mm) – 4x12" (100x300mm) in size. As the trees species is quiet defect free and clean, these large timber sizes can be easily produced and in big volumes.

#### Railway Sleepers & Big Timbers

Though Angelim Pedra is not highly durable in outdoor applications it can still have some demand as railway sleepers. This is because the species comes from very large trees that can produce railway sleeper sizes of 4'10" (100x200mm) and because the wood has cross-grain meaning it holds together well and does not split. Railway sleepers are normally required with forest management certification such as FSC or PEFC.

#### Truck Flooring

Angelim Pedra is a common species in the USA truck flooring market. This is because it wears moderately well with traffic and abrasion and has cross grain, so it does not split easily. Angelim Pedra also machines relatively well for a tropical hardwood and is dense enough at 0.80 kg/m<sup>3</sup>.

#### Sub-Construction

Even though it is durability class 2-3, some European markets, mainly the Netherlands, Belgium and Germany, accept Angelim Pedra as a sub-construction material. It is ideally sourced with FSC or PEFC certification.