

## Olon

Family. Rutaceae

Botanical Name(s).

*Fagara heitzii*

Continent. Africa

CITES. This species is not listed in the CITES Appendices (Washington Convention 2023).

Notes. OLON is often confused with OLONVOGO (*F. macrophylla*, *F. tessmannii*), which is heavier and harder.

### Description of logs

Diameter. From 55 to 80 cm

Thickness of sapwood. From 1 to 2 cm

Floats. Yes

Log durability. Moderate (treatment recommended)

### Description of wood

Colour reference. Light yellow

Sapwood. Not clearly demarcated

Texture. Medium

Grain. Straight or interlocked

Interlocked grain. Slight

Notes. Heartwood light yellow to greenish yellow. Lustrous aspect. Slight ribbon like aspect on quartersawn.

### Physics and mechanics

The properties indicated are for mature wood. These properties may vary significantly depending on the origin and growing conditions of the wood.

Property	Average value
Specific gravity <sup>1</sup>	0.52
Monnin hardness <sup>1</sup>	2.0
Coefficient of volumetric shrinkage	0.40 % per %
Total tangential shrinkage (St)	5.7 %
Total radial shrinkage (Sr)	3.8 %
Ratio St/Sr	1.5
Fibre saturation point	30 %
Thermal conductivity (λ)	0.18 W/(m.K)
Lower heating value	
Crushing strength <sup>1</sup>	44 MPa
Static bending strength <sup>1</sup>	72 MPa
Modulus of elasticity <sup>1</sup>	12,410 MPa

<sup>1</sup> At 12 % moisture content, with 1 MPa = 1 N/mm



Quarter sawn



Flat sawn

## Natural durability and preservation

Resistance to fungi. Class 3 - moderately durable

Resistance to dry wood borers. Class S - susceptible (risk in all the wood)

Resistance to termites. Class M - moderately durable

Treatability. Class 2-3 - poorly to moderately permeable

Use class ensured by natural durability.

Class 2 - inside or under cover (dampness possible)

Notes. This species is listed in the European standard NF EN 350 (2016). Prone to blue stain.

## Requirement of a preservative treatment

Against dry wood borer. Requires appropriate preservative treatment

In case of temporary humidification. Requires appropriate preservative treatment

In case of permanent humidification. Use not recommended

## Drying

Drying rate. Normal

Risk of distorsion. Slight risk

Risk of casehardening. No known specific risk

Risk of checking. Slight risk

Risk of collapse. No known specific risk

Notes.

Suggested drying program.

Phases	Duration (H)	MC (%) probes	T (°C)	Rh (%)	UGL (%)
<b>Prewarm 1</b>		> 50	50	86	16.5
<b>Prewarm 2</b>	3	> 50	52	85	16.0
<b>Drying</b>		> 50	55	82	14.7
		50 - 40	55	80.0	13.8
		40 - 35	55	75.0	12.6
		35 - 30	56	73.0	12.0
		30 - 27	58	67.0	10.5
		27 - 24	60	58.0	8.9
		24 - 21	62	50.0	7.5
		21 - 18	64	45.0	6.8
		18 - 15	65	37.0	5.7
		15 - 12	65	34.0	5.3
		12 - 9	65	28.0	4.5
		9 - 6	65	24.0	4.0
<b>Conditioning</b>	6		58	(3)	(2)
<b>Cooling</b>	(1)		Stop	(3)	(2)

(1) ) Cooling: until the temperature inside the kiln no longer exceeds external temperature by more than 30 °C.

(2) UGL = final H% x 0,8 to 0,9.

(3) Subtract RH from the UGL determined in (2) and temperature, using the Hailwood-Horrobin equation.

## Sawing and machining

Blunting effect. Normal

**Sawteeth recommended.** Ordinary or alloy steel

**Cutting tools.** Ordinary

**Peeling.** Good

**Slicing.** Good

**Notes.** Some difficulties in planing due to interlocked grain. Silica content may be quite high. Sawdust sometimes irritant.

## Assembling

**Nailing and screwing.** Good

## Commercial grading

**Appearance grading for sawn timbers.**

According to the ATIBT grading rules (2017), the main choices are: FAS (First And Second), n°1 Common and select, n°2 Common (see details of these rules on the ATIBT website).

**Visual grading for structural applications**

No visual grading for structural applications

## Fire safety

**Conventional French grading.**

Thickness > 14 mm: M3 (moderately inflammable)

Thickness < 14 mm: M4 (easily inflammable)

**Euroclasses grading.** D-s2, d0

Default grading for solid wood, according to requirements of European standard EN 14081-1+A1 (August 2019). It concerns structural graded timber in vertical uses and ceiling with mean density upper 0.35 and thickness upper 22 mm.

## End-uses

- Blockboard
- Boxes and crates
- Current furniture or furniture components
- Fiber or particle boards
- Formwork
- Glued laminated
- Interior joinery
- Interior panelling
- Light carpentry
- Moulding
- Sliced veneer
- Veneer for back or face of plywood
- Veneer for interior of plywood
- Wood frame house

**Notes.** Bark has numerous medical applications.

## Main local names

Country	Local name
Cameroon	Bongo
Congo	M'banza
Democratic Republic of the Congo	Kamasumu
Equatorial Guinea	Olong
Gabon	Olon