

# Elite

FT007/02\_en

## Specifications

**Production:** Process for producing *Elite* cork stoppers by individual moulding

### Size specifications <sup>(1)</sup>:

Length (40 and 44 mm)	Nominal value $\pm$ 0.50
Diameter (mm)	Nominal value $\pm$ 0.30

### Control points:

1. Humidity <sup>(2)</sup>	6.0% $\pm$ 2.0
2. Specific weight <sup>(1)</sup>	285 kg/m <sup>3</sup> $\pm$ 25
3. Resistance to boiling water <sup>(3)</sup>	Absence of disaggregation
4. Sensory analysis <sup>(5)</sup>	Neutral
5. Capillarity <sup>(5)</sup>	< 2 mm
6. Residual peroxide <sup>(4)</sup> <sup>(5)</sup>	< 0.2 mg/cork stopper
7. Residual solids <sup>(5)</sup>	< 2.5 mg/cork stopper (Untreated cork stoppers) < 1.5 mg/cork stopper (Treated cork stoppers)
8. Extraction force <sup>(6)</sup>	30 daN $\pm$ 5
9. Compression force <sup>(7)</sup>	80 $\pm$ 30 daN
10. Torsion <sup>(8)</sup>	
Angle	> 35°
Momentum	> 17 daN.cm
Shear stress	> 6 daN/cm <sup>2</sup>
11. Liquid seal capability <sup>(9)</sup>	100% $\leq$ 2.5 bar
12. 2,4,6 - TCA <sup>(5)</sup>	< 1.5 ng/L
PCA	< LD
TeCA	< LD
TBA	< LD

### Standards:

<sup>(1)</sup> NP 4351 / NP 2803-1	<sup>(2)</sup> NP 4351 / NP 2803-02	<sup>(3)</sup> NP 4351 / NP 2803-7
<sup>(4)</sup> SYSTECODE	<sup>(5)</sup> Internal Method	<sup>(6)</sup> NP 4351 / NP 2803-4
<sup>(7)</sup> NP 2803-3	<sup>(8)</sup> NP 4351 / NP 2803-6	<sup>(9)</sup> NP 2803-5



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### Manufacturing process

The *Elite* cork stopper is a technical cork stopper made up of a fine agglomerated body (0.5 to 2 mm granulates) with a natural cork disc at each end.

The *Elite* cork stopper body is manufactured by individual moulding, by simultaneously gluing the two natural cork disks at a single stage. This technique allows the production of a more homogeneous cork stopper. The cork granulates of the cork stopper's body cover the entire surface of the natural bark disks. This perfect connection between the three cork stopper's components (agglomerate body + 2 disks) guarantees a specific uniformity and mechanical behaviour (elasticity, compression force, extraction strength, resistance to boiling water and seal capability).

The products used in the manufacture of *Elite* cork stoppers comply with all FDA requirements.

### TCA control

The guarantee that the presence of TCA is at a level below 1.5 ng/L in *Elite* cork stoppers is achieved by the following three elements:

- **Raw material (Cork):** All raw material used in producing *Elite* cork stoppers comes from cork exclusively selected, bought and processed by Grupo Piedade.
- **Steam treatment:** The treatment for disinfecting granulates is made by a continuous steam or water system, which allows the reduction of the residual TCA values.
- **Control of TCA levels by GC-MS:** Grupo Piedade relies on its own laboratory and quality control systems. Representative samples at each production phase are analysed by GC-MS.