

ORGANOLEPTIC CHARACTERISTICS

Method	Parameters	Specifications	Tolerances
(soak test in 12% hydro-alcoholic solution acidified to pH 3.5 / 25 corks) SPME/GC/MS	releasable 2,4,6-TCA (ng/L) releasable 2,3,4,6-TeCA (ng/L) releasable PCA (ng/L) releasable 2,4,6-TBA (ng/L)	\leq QL ^(b) \leq QL ^(b) \leq QL ^(b) \leq QL ^(b)	

DIMENSIONAL CHARACTERISTICS

Method	Parameters	Specifications	Tolerances
(calliper gauge / 32 corks) Length : 47 / 49 / 54 mm Diameter : 23,5 / 24,2 mm	Length (mm)	$L \pm 0.4$	AQL 1.5 (A1/R2)
	Diameter (mm)	$D \pm 0.3$	AQL 1.5 (A1/R2)
	Chamfer (mm)	1.0 ± 0.5	AQL 2.5 (A2/R3) ^(c)

PERMEABILITY

Method	Parameters	Specifications
Manometric internal methodology (8 corks) (d)	OTR ratio (Oxygen Transfer Rate) (cm ³ /day)	ratio = 0,07 (Very low)

PHYSICAL CHARACTERISTICS

Method	Parameters	Specifications	Tolerances
(4 jaw corks / 5 corks)	dimensional recovery / 30sec. (%) ^(e)	$\geq 97\%$	AQL 2.5 (A0/R1)
(traction compression machine / 5 corks)	elastic recovery (N/cm ²) ^(e)	$> 2,8$	AQL 2.5 (A0/R1)
(calibrated tubes / 6 corks)	liquid tightness (%) ^(e)	100% > 1.5 bars	
(on CETIE bottle neck / 5 corks)	extraction force (daN)	20 $< 100\% < 40$ 25 $< 100\% < 45$ (54 mm)	
(by stirring and filtering / 4 corks)	dust content (mg/cork)	≤ 0.3	
(by titration / 4 corks)	Residual peroxide (mg/cork)	≤ 0.1	

The above technical specifications are valid for up to 120 months.

(a) The above specifications assume compliance with manufacturer's bottling and storage guidelines.

(b) QUANTIFICATION LIMIT (QL): the quantification limit by SPME/GC/MS is 0.3 ng/L for TCA, it is 1ng/L for TeCA and PCA and it is 2ng/L for TBA. This is an indicative value based on internal methodology, available upon request.

(c) ACCEPTABLE QUALITY LEVEL (AQL): A2/R3 implies that for 32 corks tested: the batch is accepted if a maximum of 2 corks only, show results outside our specifications and the batch is refused if 3 or more corks show results outside our specifications.

(d) Internal methodology, available on request.

(e) The follow up frequency of this parameter is established in order to regularly evaluate our production batches..

Compliant with regulations governing food contact packaging (EC Framework Regulation 1935/2004 and texts specific to materials Regulation n° 10/2011) based on FDA standards (Code CFR21), global migration (according to Regulation 10/2011), specific migration (according to Regulation 10/2011) and different European Resolutions relating to cork and coating products. Compliant with regulations governing packaging and packaging waste. Certificate of compliance available upon request when placing the order.

* DIAMANT, a DIAM BOUCHAGE / CEA technology (PATENT EP 1 216 123 B1).