# Technical Sheet NATURAL ONEBYONE® Cork Stoppers





The revolutionary ONEBYONE® technology enables the individual analysis of natural cork stoppers, through a fully automated process, which reveals our maximum commitment to the performance and quality of premium cork stoppers.

The process works through a gas-phase spectroscopy system, and inspects cork stoppers one by one, in order to detect traces of TCA(1). This technology is associated with the 'Bottle buy back commitment' guarantee, which guarantees reimbursement of the value of the bottle at retail price, if after analysing the wine and the cork stopper, at the M.A.SILVA laboratory, TCA ≥ 0.5 ng/L derived from the cork stopper is detected(2).

<sup>(1)</sup> Quantification limit of 0,5 ng/L. Analysis performed in accordance to ISO 20752. (2) In case of cork taint claim on a bottle sealed with our one by one inspected cork, we will buy the bottle back. We will test the wine and cork in our lab. If the corkderived TCA of the sample is  $\geq$  1.0ppt (ng/L) we will reimburse the retail release price of the wine.

## **TECHNOLOGIES**



#### **DYNAVOX®** Raw material sterilization and vaporization



#### SARA ADVANCED® Extraction of volatiles and sensory standardization



**ONEBYONE®** Individual cork testing



MASZONE® Elimination of microorganisms



We can supply FSC® certified products (FSC - C009204) upon request.

## **SUSTAINABILITY**

#### ALL FOR THE ENVIRONMENT

Our actions are proven through the quality of our cork stoppers, the partnerships we build, the figures we present and our contribution to an increasingly greener world.



### **NEGATIVE CARBON FOOTPRINT**

Study carried out by KPMG according to the Group's strategic sustainability axis.



#### Technical Sheet

# NATURAL ONEBYONE®



# Cork Stoppers

# **TECHNICAL SPECIFICATIONS**

#### APPLICATION

NATURAL cork stoppers can and should be used with all kinds of wines, regardless of the aging period and bottle shape.

#### SIZES

Length Nominal ± 0,7 mm Diameter Nominal ± 0,5 mm Runout Ovalisation ≤ 0,7 mm

TCA(1) (2)

Out Tig/L

Quantification limit of 0,5 ng/L. Analysis performed in accordance to ISO 20752.

(a) In case of cork taint claim on a bottle sealed with our one by one inspected cork, we will buy the bottle back. We will test the wine and cork in our lab if the confiderived TCA of the sample is > 10ppt (ng/L) we will reimburse the retail release price of the wine.

#### PHYSICAL

4%-8% Moisture Dimensional recovery > 96%

#### **FUNCTIONAL**

Stopper Extraction Forces: 15daN<Fe<40daN Sealing capacity No leaks at 1.5 bar Capillarity <1mm

#### STORAGE

Use no later than 6 months 40% - 70% RH Moisture in storage 15°C-20°C | 59°F-68°F Storage temperature

Storage place Store the stoppers in a clean, well-ventilated and

odor-free place, away from products containing

chlorine.

## PRODUCTION FLOW

#### **Raw Material**

CORK OAK STRIPPING

[ Cork planks are stripped from cork oak trees]

GC/MS TCA CONTROL

VAPD **STABILIZATION** 

[ Planks are stored from 6 to 9 months on a concrete floor 1

#### **BOILING** DYNAVOX® SYSTEM

[ Planks are sterilized and disinfected through a vaporized pressure system.

GC/MS TCA CONTROL

STABILIZATION AFTER BOILING

[Stabilization period after vaporization ]

COPK PLANKS SORTING FOR **PRODUCTION** 

[ First sorting of planks for production ]

### **Production**

CORK PLANK CUTTING Planks are cut into strips

Punching of cork strips

PUNCHING ----- STERILIZATION -----SARA ADVANCED® SYSTEM

NATURAL cork stoppers are vaporized and sterilized PRE-DRYING First moisture

level definition

GC/MS TCA

CONTROL

GC/MSTCA ----- WASHING -----CONTROL

MASZONE® SYSTEM Washing and sterilization

2D AND 3D First electronic sorting to determine visual classes.

ELECTRONIC GRADING ----- CORRECTION OF SIZES -----Precise correction of corks sizes

DRYING -----Final moisture definition

2D AND 3D

Second electronic sorting to determine visual classes.

Final visual grading control

ELECTRONIC GRADING ----- MANUAL SORTING ----- INDIVIDUAL CORK TESTING ONEBYONE® SYSTEM

> Individual analysis of natural cork stoppers TCA <0,5 ng/L(1)(1) Quantification limit of 0,5 ng/L. Analysis performed in accordance to ISO 20752.

### **Customization and Packaging**

PRINTING

Customized printing on stoppers

FINAL TREATMENT

To facilitate the bottling process

GC/MS TCA CONTROL

**PACKAGING** According to specifications



