

Technical sheet

NEO SELECT® MICRO AGGLOMERATE STOPPERS



NEO® cork stoppers are technical cork stoppers, produced using granules sterilised by one of M.A.SILVA's most innovative and revolutionary technologies - NEOTECH®

This technology allows improving the performance and properties of cork's natural characteristics, in addition to guaranteeing the elimination of TCA. M.A.SILVA's portfolio has different cork stoppers subjected to this technology, with different technical specifications.

We move to produce the best, while taking care of the best. It's our nature. We take care of what is ours and of future generations. We take care of the oak forest, which brings us life. We take care of the raw materials we select. We take care of the natural components we choose. We take care of the production process from start to finish. We take care of the wines we preserve. We take care of what makes us move.

TECHNOLOGIES



DYNAVOX®

Raw material sterilization and vaporization



NFOTECH®

Sterilisation and vaporisation of granules



MASZONE®

Elimination of microorganisms



The mark of responsible forestry

Products are available as FSC® certified on request 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 NEO SELECT® MICRO AGGLOMERATE STOPPERS



15daN<Fe<45daN

TECHNICAL SPECIFICATIONS

NEO SELECT® micro-agglomerate cork stoppers, which incorporate more eco friendly components throughout their 100% vertical production process. Technical stoppers with the benefits of an more ecological $% \left\{ 1,2,\ldots ,n\right\}$ cork stopper and the feel of a natural stopper. The best choice for those who decide bearing in mind the planet and the quality of the wine to be

PHYSICAL-MECHANICAL

Lenght Dimensional recovery Moisture Specific weight Boiling water resistence Sealing capacity Chamfer Granules size Microspheres

 $X \pm 0.3 \, \text{mm}$ >96% 3% < HR < 7% +/- 40kg/m3 No desintegration No leaks at 2 bar (a 20°C) 2.5 mm 0.5 mm - 1 mm No use Plant-based polyol Bonding agent

STANDARD DIMENSIONS

PHYSICAL-CHEMICAL

Stopper extration forces OIR - OTR (1) 6 months

0,89 mg 12 months 1,00 mg Per year, after 12 months

0,05 mg (1) OIR - Oxygen Initial Release. OTR - Oxygen Transfer Rate. Results obtained by chemilumi-nescence with CETIE bottles.

 $< 0,5 \, \text{ng/L}$

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

PRODUCTION

Process Branding

TCA (2)

STORAGE

Use no later then (3)

Moisture in storage Storage temperature

GC/MS

TCA CONTROL

Storage place

Ink, laser and fire.

Moulding

6 months (3) As a good practice, the product should be used according to the FIFO methodology and as soon as possible, keeping the bags closed.

40% - 70% RH 15°C-20°C|59°F-68°F

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 1

GC/MS TCA CONTROL

YARD STABILIZATION

X ± 0,5 mm

49x24 mm | 49x25 mm

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

BOILING | DYNAVOX® SYSTEM

[Planks are sterilized and disinfected through a vaporized pressure system] STABILIZATION AFTER BOILING

[Stabilization period after vaporization]

CORK PLANKS SORTING FOR PRODUCTION

[First sorting of planks for production]

Production

GRINDING Cork granule

production process

STEDII IZATION I **NEOTECH® SYSTEM** Cork granules are

vaporized and sterilized

GC / MS TCA CONTROL

AGLOMERATION Production of micro agglomerated bodies

GC / MS **TCA CONTROL**

COPPECTION **OF SIZES** Precise correction of corks sizes

ELECTRONIC GRADING | --**2D AND 3D**

Electronic sorting

DRYING Final moisture definition

GC/MS TCA CONTROL

WASHING | MASZONE® SYSTEM Washing and sterilization **DUSTING DOWN**

Customization and Packaging

PRINTING

Customized printing on stoppers

FINAL TREATMENT

To facilitate the bottling process

GC/MS TCA CONTROL

PACKAGING According to specifications