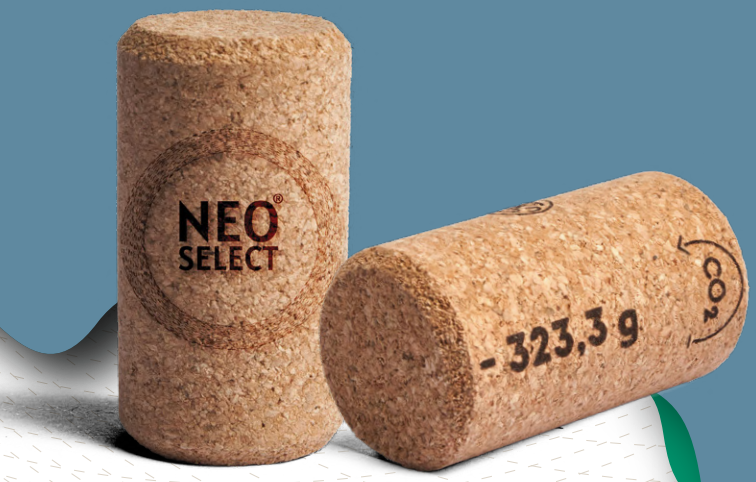
M·A·SILVA
Premium Cork Stoppers

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 organic 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

**NEOTECH®**
Sterilisation and vaporisationof granules

**MASZONE®**
Elimination of microorganisms

FSC
www.fsc.org
FSC® C009204
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.

CO2

### NEGATIVE CARBON FOOTPRINT
Study carried out by KPMG according to the Group's strategic sustainability axis.

-323,3g

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# NEO SELECT® MICRO AGGLOMERATE STOPPERS

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## TECHNICAL SPECIFICATIONS

NEO SELECT® micro-agglomerate cork stoppers, which incorporate only organic components throughout their 100% vertical production process. Technical stoppers with the benefits of an ecological 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 preserved.

### PHYSICAL-MECHANICAL

| | |
|---|---|
| Lenght | X ± 0,5 mm |
| Diameter | X ± 0,3 mm |
| Dimensional recovery | >90% |
| Moisture | 3% < HR < 7% |
| Specific weight | +/- 40kg/m3 |
| Boiling water resistence | No desintegration |
| Sealing capacity | No leaks at 2 bar (a 20°C) |
| Chamfer | 2,5 mm |
| Granules size | 0,5 mm - 1 mm |
| Microspheres | No use |
| Bonding agent | Plant-based polyol |

### STANDARD DIMENSIONS

49x24 mm | 49x25 mm

### PHYSICAL-CHEMICAL

| | | |
|---|---|---|
| Stopper extration forces | | 15daN<Fe<45daN |
| 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 chemiluminescence with CETIE bottles.

| | |
|---|---|
| TCA (2) | < 0,5 ng/L |

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

### PRODUCTION

| | |
|---|---|
| Process | Moulding |
| Branding | Ink, laser and fire. |

### STORAGE

| | |
|---|---|
| Use no later then (3) | 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.

| | |
|---|---|
| Moisture in storage | 40% – 70% RH |
| Storage temperature | 15°C – 20°C \| 59°F – 68°F |
| 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**

**YARD STABILIZATION**
[ 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 ]

**GC / MS TCA CONTROL**

**STABILIZATION AFTER BOILING**
[ Stabilization period after vaporization]

**CORK PLANKS SORTING FOR PRODUCTION**
[ First sorting of planks for production ]

### Production

**GRINDING**
Cork granule production process

**STERILIZATION | NEOTECH® SYSTEM**
Cork granules are vaporized and sterilized

**GC / MS TCA CONTROL**

**AGLOMERATION**
Production of micro agglomerated bodies

**GC / MS TCA CONTROL**

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

**DUSTING DOWN**

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

**GC / MS TCA CONTROL**

**DRYING**
Final moisture definition

**ELECTRONIC GRADING | 2D AND 3D**
Electronic sorting

### Customization and Packaging

**PRINTING**
Customized printing on stoppers

**FINAL TREATMENT**
To facilitate the bottling process

**GC / MS TCA CONTROL**

**PACKAGING**
According to specifications