

A photograph of a wine bottle lying on its side on a rustic wooden surface. The bottle is dark and has a cork in its neck. Several other corks are scattered around the bottle. The background is a close-up of the wood grain.

Corkcoal[®]

BY ESTAL & PARRAMON

2022

IN SEARCH FOR THE MOST
SUSTAINABLE STOPPER

...WE DISCOVERED CORKCOAL



In the creation of micro-granulated cork stoppers as we know it, complex industrial processes are employed, using large quantities of water, energy and chemical agents. All of this to remove unwanted properties from cork such as: TCA, taste, smell, defects, colour...

Corkcoal[®]

WE MIX CORK WITH ACTIVATED CHARCOAL.

Activated charcoal naturally neutralizes and traps unwanted substances from the cork.

Corkcoal stoppers accept and integrate variations in micro-granule colour and size with the aim of offering **the most sustainable stopper on the market.**





WHY CORKCOAL?

BECAUSE OF SUSTAINABILITY

RAW MATERIALS

LESS WASTE WITHOUT SACRIFICING QUALITY

WE ACHIEVE A BETTER USE OF RAW MATERIALS, REDUCING THE VOLUME OF DISCARDS AND WASTE

WHERE OTHERS SEE DEFECTS, WE SEE NATURAL QUALITIES.

THANKS TO THE USE OF ACTIVATED CARBON, AN IMPURITY OR A NOTICEABLE DIFFERENCE IN THE SIZE OR COLOUR OF THE CORK PARTICLES IS NOT A PROBLEM. WE REDUCE THE DISCARD VOLUME OF RAW MATERIALS AND CONSEQUENTLY, THE WASTE.

INDUSTRIAL PROCESSES

FEWER WASHES AND NO CHEMICAL BLEACHES

ACTIVATED CARBON ACTS AS A MEANS OF NATURALLY NEUTRALISING UNWANTED SUBSTANCES IN THE CORK, THUS REDUCING THE WASHING PROCESS AND WITHOUT THE NEED FOR CHEMICAL BLEACHING AGENTS.

WE REDUCE THE IMPACT OF THE INDUSTRIAL WASHING PROCESS, ACCEPTING COLOUR DIFFERENCES IN THE MICROGRANULES. BY DOING THIS, WE MINIMISE WATER AND ENERGY CONSUMPTION.

...AND ABOVE ALL, WE DO SO WITHOUT THE USE OF CHEMICAL BLEACHES.

ORIGIN & CARBON FOOTPRINT

WE REDUCE THE CARBON FOOTPRINT

THE USE OF ACTIVATED CHARCOAL FACILITATES A SIGNIFICANT REDUCTION OF THE CARBON FOOTPRINT ACROSS THE ENTIRE PROCESS OF INDUSTRIALIZATION OF A MICROGRANULATED STOPPER OF THE SAME SIZE.

ACTIVATED CHARCOAL IS OF PLANT ORIGIN AND, ALTHOUGH ITS PRODUCTION GENERATES A CONSIDERABLE CARBON FOOTPRINT, THE BENEFITS IT PROVIDES IN TERMS OF INDUSTRIAL EFFICIENCY MORE THAN COMPENSATE FOR ITS USE.

BECAUSE OF SUSTAINABILITY

MORE EFFICIENT DESIGNS

MONOBLOC STOPPERS

CORKCOAL MONOBLOC (ONE PIECE) MICROGRANULATED STOPPERS WITHOUT THE USE OF GLUES IN THE ASSEMBLY WITH OTHER MATERIALS.

THE MONOBLOC MICROGRANULATION ALLOWS US TO OBTAIN BAR-TOP STOPPERS MADE FROM A SINGLE PIECE, GOING THROUGH A SINGLE INDUSTRIAL PROCESS.

MOST OF THE CURRENT BAR-TOP STOPPERS ARE MADE OF TWO MATERIALS (CORK + WOOD, PLASTIC OR METAL ALLOYS) AND USE GLUE FOR THE ASSEMBLY.

MATERIAL OPTIMISATION

LIGHTER STOPPERS WITH SHORT 15MM STEMS

SOME OF OUR **CORKCOAL** STOPPERS HAVE SHORT STEMS, SPECIALLY DESIGNED FOR CHOKER SUPER SHORT NECK BOTTLES FROM THE RUDE AND WILDLY CRAFTED COLLECTIONS.

SHORT STEM STOPPERS ARE SPECIALLY DESIGNED TO ENSURE TIGHTNESS AND TO BE USED IN BOTTLES WITH REDUCED EXPANSION CHAMBERS.

BIODEGRADABILITY

AC AS AN ACCELERATOR OF BIODEGRADABILITY PROCESSES

ACTIVATED CHARCOAL (**AC**) IS AN INERT MATERIAL IN NATURE, WHICH ACTS AS AN ACCELERATOR IN DECOMPOSITION, UNDER CONDITIONS OF ANAEROBIC COMPOSTABILITY.

ACTIVATED CHARCOAL HAS BEEN SHOWN TO ACCELERATE THE BIODEGRADATION PROCESS.

AS IT IS SUCH A POROUS MATERIAL, IT CAPTURES OXYGEN AND OTHER GASES AS WELL AS WATER AND MICROORGANISMS WHICH PROMOTES FRAGMENTATION AND ACCELERATE THE DEGRADATION OF THE STOPPER.

ACTIVATED CHARCOAL CAN HAVE A SURFACE AREA OF MORE THAN 500 M²/G, WITH VALUES OF 1,000 M²/G BEING EASILY ACHIEVABLE. SOME ACTIVATED CHARCOALS CAN ACHIEVE VALUES OF OVER 2,500 M²/G. BY WAY OF COMPARISON, A TENNIS COURT IS ABOUT 260 M².

BECAUSE OF ORGANOLEPTIC PROPERTIES

SMELL & TASTE

BETTER ORGANOLEPTIC PERFORMANCE (NEUTRAL)

COMPARED TO OTHER CORK STOPPERS, **CORKCOAL** OFFERS A LOWER TRANSFER OF AROMAS AND FLAVOURS TO THE PRODUCT.

IN THE SENSORY TEST, ALL THE AROMAS AND FLAVOURS DETECTED CORRESPOND TO THE PLANT FAMILY AND THE INTENSITY OF THE AROMA IS LESS THAN THAT FOUND IN A COMMON CORK.

THE SENSORY TEST RESULTS COMPLY WITH THE SPECIFICATIONS OF THE INTERNATIONAL STANDARD **ISO 22308**(CORK STOPPERS SENSORY ANALYSIS) WHICH IS EQUIVALENT TO THE UNE **56928:2004** STANDARD.

TCA

TRICHLOROANISOLES (**TCA**) AT NON-DETECTABLE LEVELS

TCA LEVELS BELOW THE LIMITS DETECTABLE BY THE MEASUREMENT THRESHOLD OF THE LABORATORIES.

ACCORDING TO THE INTERNAL LABORATORY PROTOCOL **PNTM 7.5-21**, THE RESULTS OF THE HALOANISOLES CONCENTRATION OF THE **CORKCOAL** SAMPLES ARE BELOW THE DETECTION LIMIT.

CORK CENTER LABORATORY.
FUNDACIÓ INSTITUT CATALÀ DEL SURO (CATALAN CORK INSTITUTE FOUNDATION)

BECAUSE OF FORMATS

STORY-TELLING

ACTIVATED CHARCOAL AND CARBON ARE KEY IN THE PRODUCTION PROCESSES OF WINES AND SPIRITS

THE DIRECT VISUAL ASSOCIATION OF CORK CHARCOAL, ENHANCES THE STORY-TELLING OF THE PRODUCT.

FILTERING AND FINISHING ARE PROCESSES IN WHICH CARBON IS THE KEY PLAYER IN THE PRODUCTION OF WINE AND SPIRITS.

EXAMPLES: TOASTED BARRELS IN THE PRODUCTION AND FINISHING OF SPIRITS; THE FILTERING OF WINES AND SPIRITS TO ACHIEVE MAXIMUM CLARIFICATION.

APPEARANCE & EVIDENCE

TWO MATERIALS FROM NATURAL & RENEWABLE SOURCES WORKING TOGETHER

... AND YES! YOU CAN SEE THE ACTIVATED CHARCOAL MIXED WITH THE MICROGRANULATED CORK. WE DON'T WANT TO HIDE IT, QUITE THE OPPOSITE: WE WANT TO SHOW IT OFF JUST AS IT DESERVES.

WE USE ACTIVATED CHARCOAL OF VARIOUS GRANULOMETRIES, AS WELL AS IN POWDER FORM. THIS GIVES **CORKCOAL** ITS INCREDIBLE QUALITIES AND ITS UNIQUE, UNMISTAKABLE APPEARANCE (EVEN MORE NATURAL). OUR ACTIVATED CHARCOAL IS OF PLANT ORIGIN AND COMES FROM RENEWABLE SOURCES.

DESIGN

HONEST DESIGNS THAT SHOW THEMSELVES AS THEY ARE

CORKCOAL STOPPERS ARE MADE FROM COMPREHENSIVE AND CONTEMPORARY GEOMETRIES SO THAT THEY CAN BE USED IN ANY PRODUCT. IT IS THE MATERIAL THAT MAKES THEM UNIQUE.

CORKCOAL STOPPERS STAND OUT FOR THE NATURAL QUALITIES OF THE MATERIAL. WE WANT TO MAKE THE QUALITIES OF **CORKCOAL** VISIBLE.

WE THEREFORE CREATE DESIGNS IN WHICH THE PROMINENCE OF THE MATERIAL PREVAILS OVER THE FORM.

The image features several pieces of corkcocoal, which are small, cylindrical, light-brown objects with a porous, textured surface. They are arranged on a dark, weathered wooden background. The text "THE Corkcocoal® COLLECTION" is overlaid in white, with "Corkcocoal" in a larger, bold font and "THE" and "COLLECTION" in a smaller font. The registered trademark symbol (®) is positioned above the 'l' in "Corkcocoal".

THE **Corkcocoal**[®] COLLECTION



SHARP

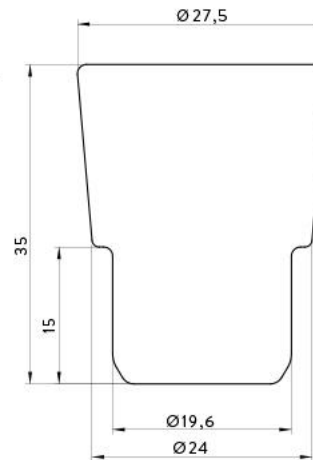
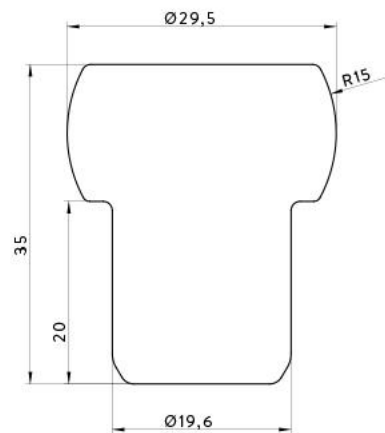
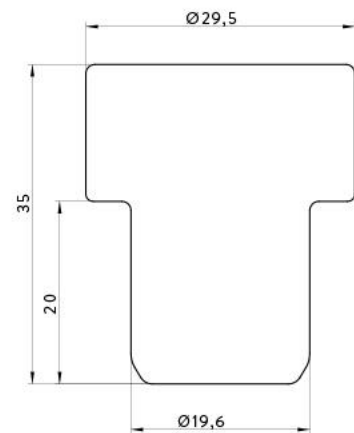


BARREL



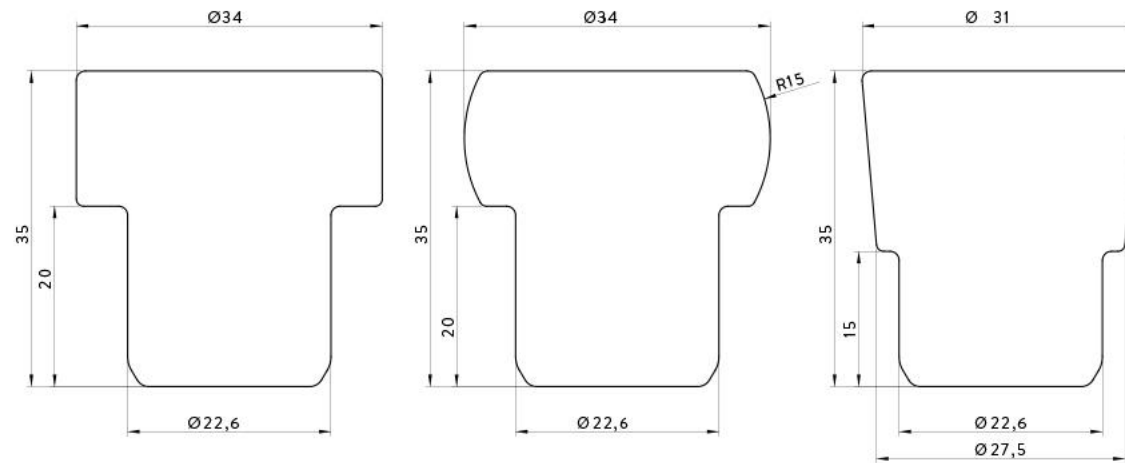
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A dark glass bottle with a cork stopper is lying on a wooden surface. The bottle is tilted, and its cap is on. Several other cork stoppers are scattered around it on the wooden surface. The text is overlaid on the image in white, bold, sans-serif font.

+ IMAGINE IT WITH THE
UNIQUE DESIGN OF THE
RUDE BOTTLES



Corkcoal is the perfect complement to Rude bottles.



A wooden bowl filled with charcoal briquettes sits on a wooden surface. Several briquettes are scattered on the surface to the right of the bowl. The text 'FAQS' is overlaid in white, bold, sans-serif font in the center of the image.

FAQS

YOUR CURIOSITY DRIVES US FORWARD

FAQS SUSTAINABILITY

Why do you add activated charcoal to the cork?

Due to its properties, the pores of the activated charcoal (AC) trap the unwanted substances (flavours and smells) of the cork, even neutralising the TCA. We reduce traditional chemical processes obtaining more sustainable stoppers.

Does using AC reduce the carbon footprint of a cork stopper?

Yes, the carbon footprint attributable to AC is much smaller than the carbon footprint of the industrial processes we save by using it.

Do you use glue in assemblies with wood?

No, the Corkcoal monobloc design of the T-top stoppers does not require assembly. And in the designs assembled with wood, the insertion and fixation of the dowel is carried out by pressure and without the use of glue.

Does a Corkcoal stopper biodegrade faster than a standard one?

Yes, the properties of AC are known to accelerate biodegradation in combination with other materials. Oxygen, water and the microorganisms needed for this process accumulate in its pores.

Are Corkcoal stoppers more sustainable?

Yes, we reduce waste and scrap, we reduce the chemicals and CO2 of several processes, we do not use glue in assembly and, furthermore, we have designed them with short stems to optimise the use of material.

FAQS ORGANOLEPTIC & DESIGN

Does Corkcoal have better organoleptic performance?

Yes. This is confirmed by research carried out by the Cork Center Laboratory from the Institut Català del Suro (Catalan Cork Institute). With only plant aromas in quantities that are below the detection levels of the standard.

Does the use of AC eliminate TCA from cork?

Yes, it traps and neutralises it completely, to levels that are not measurable by laboratories. This is an unprecedented achievement that has historically been problematic and inherent in cork as an organic material.

Does the use of AC improve the organoleptic performance of cork?

Due to its properties, the pores of the AC naturally trap all the unwanted substances (flavours and smells) of the cork, even neutralising the TCA (it is the best stopper on the market in this respect).

Why are some designs monobloc?

Monobloc designs are more efficient and sustainable, require just one single industrial transformation process and can be recycled more easily as the separation of their components is not necessary.

Does Corkcoal help me build the story-telling of my product?

Yes, in many cases, the use of activated charcoal or other carbon derivatives is key in the production of wines and spirits (example: the carbonisation of the wood inside barrels). The visual association of cork with the charcoal reinforces and highlights the story.

AND IN 2023..

THE CORKCOAL FAMILY WITH WOOD



MORE EFFICIENT DESIGNS

MONOBLOC AND ASSEMBLED STOPPERS WITHOUT USING GLUE

CORKCOAL MONOBLOC (ONE PIECE) MICROGRANULATED STOPPERS WITHOUT THE USE OF GLUES IN THE ASSEMBLY WITH OTHER MATERIALS.

- ✓ MOST OF THE CURRENT BAR-TOP STOPPERS ARE MADE OF TWO MATERIALS (CORK + WOOD, PLASTIC OR METAL ALLOYS) AND USE GLUE FOR THE ASSEMBLY.
- ✓ BUT CORKCOAL STOPPERS COMBINED WITH WOOD ARE ASSEMBLED AND FIXED BY PRESSURE WITHOUT THE USE OF GLUE.

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Corkcoal®