BIOX CARBON

Where Nature Meets Innovation

BIOX CARBON is an Algerian leader in transforming olive pomace, an abundant local resource, into high value-added products.
Born from the industrial evolution of SARL Bitume Oxydée de l'Est, our company embodies a successful transition to a circular and sustainable economy.

We specialize in the design and production of purification, combustion, and agricultural amendment solutions that meet the most demanding standards of industrial and consumer markets.

OUR VISION

Our vision is to become a leading national and regional player in the sustainable transformation of agricultural biomass.

OUR HISTORY

Founded in 1999 in Berrahal (Annaba Province), our company, initially named SARL Bitume Oxydée de l'Est, was a recognized player in the production of bitumen for waterproofing applications

In 2013, aware of environmental challenges and the untapped potential of local biomass, we initiated a fundamental strategic transition. We progressively redirected our industrial expertise to focus on the valorization of by-products from olive cultivation.

This transformation gave rise to BIOX CARBON, a resolutely forward-thinking company whose mission is to create high-performance, clean products from renewable resources.

BIOX CARBON

OUR OBJECTIVES

1. **Sustainability:** To offer solutions with a low carbon footprint by valorizing a local, renewable resource.
2. **Quality:** To guarantee high-performance, reliable, and traceable "Made in Algeria" products, offering a quality alternative to imported goods.
3. **Innovation:** To continuously invest in our processes to optimize quality and develop new applications for our products.
4. **Partnership:** To provide our industrial clients with accessible technical products and expert support for their purification needs.

BIOX CARBON

OUR PRODUCT RANGES

Our unique expertise in processing olive pomace allows us to offer three distinct product ranges, each meeting specific needs.

1) High-Performance Activated Carbon

Through our thermal steam activation process, we produce non-regenerated activated carbon of very high purity, with a specific surface area (BET) ranging from 800 to 1200 m2/g.

OLEASORB

OLEASORB (Granular Activated Carbon - GAC) : A range of robust and dense granules, ideal for liquid and gas phase filtration. Its applications include drinking water treatment, process water purification, effluent treatment, and precious metal recovery.

FILTRA GREEN

FILTRA GREEN (Powdered Activated Carbon - PAC): A range of fine powders with rapid kinetics, perfect for direct dosing. It is used for decolorization in the food and beverage industry, fine chemical purification, and the treatment of water pollution peaks.

2) Quick-Light Charcoal Briquettes

FASTLITE

FASTLITE : Designed for the incense market, our FASTLITE briquettes are engineered for an optimal user experience: rapid ignition, stable and uniform combustion, and a distinctive light-colored ash, which is a sign of purity.

3) Biochar for Sustainable Agriculture

TERROLYVE

TERROLYVE : Produced through a pyrolysis process, our biochar is an exceptional soil amendment. It improves water and nutrient retention, regulates pH, and contributes to the regeneration of depleted soils, promoting a more resilient and productive agriculture.

BIOX CARBON

OUR PRODUCTION PROCESS

Our production site is equipped with modern and integrated industrial lines:

1. **Pyrolysis Line :** Transformation of olive pomace into charcoal through a controlled pyrolysis process.
2. **Activation Line :** Development of the charcoal's porous structure in an industrial rotary kiln via high-temperature steam injection.
3. **Finishing Lines :** Dedicated units for crushing, pressing, drying, sizing, screening, stone removal, and packaging to ensure finished products meet each client's specifications.

Our annual production capacity can reach 660 tons of activated carbon and over 1000 tons of Biochar.

WHY CHOOSE US

- **Unique Expertise :** Complete mastery of the value chain, from raw material to finished product.
- **Sustainable Origin :** Products derived 100% from Algerian olive biomass.
- **Guaranteed Performance :** Controlled technical specifications compliant with international standards (ASTM).
- **Flexibility :** The ability to adapt the particle size and characteristics of our products to your needs.
- **Reliable Local Partner :** An Algerian producer committed to quality and customer satisfaction.

BIOX CARBON

ACTIVATED CARBON

FROM OLIVE POMACE

OLEASORB FILTRA GREEN

Your trusted source for high-quality activated carbon from olive pomace.

We are a specialized producer of premium activated carbon derived from a unique and sustainable resource: olive pomace. By valorizing this by-product of the olive oil industry, we have developed unique expertise in mastering steam activation to create a carbon with exceptional performance. Our commitment is to provide innovative and environmentally friendly purification solutions.

Customized Solutions with Olive Pomace Activated Carbon

Our Olea Sorb (granular) and Filtra Green (powdered) ranges are recognized for their exceptional performance and versatility. Designed to meet the specific requirements of each industry, our solutions are backed by in-depth technical expertise. We collaborate closely with our clients to develop innovative activated carbon solutions that address unique challenges and guarantee optimal results.

Granular activated carbon from olive pomace

Powder activated carbon from olive pomace

An Effective, Sustainable, and Local Solution

Highly microporous structure: Guarantees superior adsorption capacities , particularly effective for low molecular weight molecules.

Exceptional hardness: Offers long-lasting durability and performance , minimizing attrition losses in demanding applications.

Reactivation potential : Improves the cost-effectiveness of your industrial operations and supports a responsible approach to waste reduction.

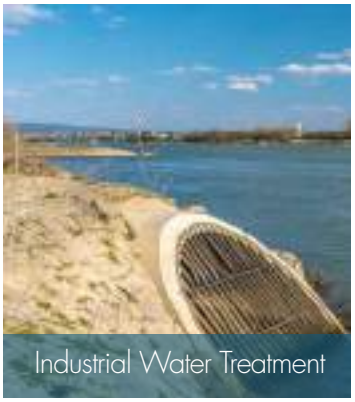
Sustainable choice : Based on a renewable raw material, our carbon is part of a circular economy approach that valorizes a local resourceen valorisant une ressource locale.

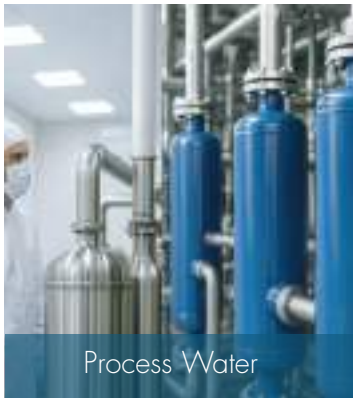
BIOX CARBON

SELECTED APPLICATIONS


Potable Water Purification


Wastewater Treatment


Industrial Water Treatment


Process Water

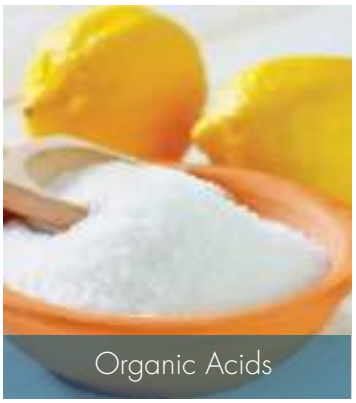

Pool Filters

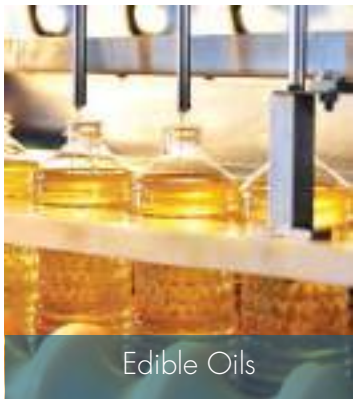

Aquarium Filters


Sweeteners


Brewing and Bottling

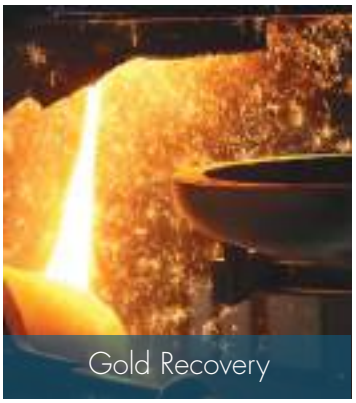

Fruit Juices

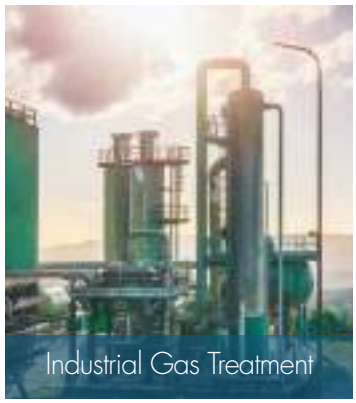

Organic Acids


Edible Oils


Supercapacitors


API Purification


Gold Recovery


Industrial Gas Treatment


Solvent Recovery

BIOX CARBON

OLEASORB

GRANULAR ACTIVATED CARBON FROM OLIVE POMACE

The Olea Sorb range is a series of high-quality granular activated carbons produced exclusively from selected olive pomace. Our controlled steam activation process develops a highly microporous internal structure, giving the product excellent adsorption capacity for a wide range of organic contaminants.

The superior mechanical hardness and low dust content of Olea Sorb make it an ideal choice for liquid and gas phase applications, ensuring reliable performance and a long service life in filtration systems..

Typical Applications

Potable Water Treatment: Dechlorination and removal of disinfection by-products (THMs). Taste and odor improvement. Removal of pesticides and organic micropollutants.

Air and Gas Treatment: Removal of volatile organic compounds (VOCs). Deodorization of air streams. Biogas purification (siloxane removal).

Industrial Process Water Treatment: Water purification for the food and beverage industry. Protection of ion exchange resins.

Precious Metal Recovery (Gold Mining): Excellent performance in Carbon-in-Leach (CIL), Carbon-in-Pulp (CIP), and Carbon-in-Column (CIC) processes due to its high abrasion resistance and rapid adsorption kinetics.

Features and Benefits

Sustainable Raw Material: Produced 100% from olive pomace, a renewable and valorized resource.

High Purity: Low ash content and activation via a purely thermal process, without the addition of chemicals.

Controlled Quality: All parameters are rigorously tested according to international ASTM standards.

High Adsorption Capacity: The developed microporous structure is highly effective for the removal of low molecular weight organic compounds, tastes, odors, and chlorine.

Excellent Mechanical Strength: Its high hardness minimizes attrition losses during backwashing and transport operations, thereby reducing operating costs.

BIOX CARBON

Technical Specifications

Parameter	Specification	Test Method
Iodine Number	800 - 1200 mg/g	ASTM D4607
Hardness (Ball-Pan)	≥ 95 %	ASTM D3802
Moisture Content (as packed)	≤ 5 %	ASTM D2867
Total Ash Content	≤ 5 %	ASTM D2866

Typical Physical Properties

Parameter	Typical Value	Test Method
Specific Surface Area (BET)	800 - 1200 m^2/g	ASTM D3663 / D6556
Apparent Density	370 - 480 kg/m^3	ASTM D2854
pH	4 - 11	ASTM D3838
Methylene Blue Number	200 - 250 mg/g	ASTM D4607
Attrition Loss	≤ 4 %	ASTM D3802
Uniformity Coefficient	< 2.0	ASTM D2862
Appearance	Irregular black granules	Visual
Odor	Odorless	Organoleptic

Available Particle Sizes

Our crushing process allows us to offer the most common standard market sizes, including::

- 4 x 8 mesh (4.75 - 2.36 mm)
- 8 x 16 mesh (2.36 - 1.18 mm)
- 6*12 mesh (3.36- 1.68 mm)
- 8 x 30 mesh (2.36 - 0.60 mm)
- 12 x 30 mesh (1.70 - 0.60 mm)

Other particle sizes available upon request within the 4×30 mesh range [ASTM D2862].

Packaging

- 25 kg multi-wall paper bags on pallets
- 500 kg polypropylene FIBCs (big bags) with a polyethylene inner liner

Storage

Store in a dry, well-ventilated area, away from direct sunlight, heat sources, and oxidizing agents. Keep in the original sealed packaging to maintain product integrity.

Safety and Handling

Activated carbon is a safe product. However, wet activated carbon can deplete oxygen in confined spaces. Adhere to safety procedures for working in potentially oxygen-deficient atmospheres. Avoid inhaling dust during handling. A Safety Data Sheet (SDS) is available upon request.

BIOX CARBON

OLEASORB GAC-800 S

GRANULAR ACTIVATED CARBON
For general water & air treatment

Olea Sorb GAC-800 S is a granular activated carbon produced by the steam activation of selected olive pomace. This controlled manufacturing process develops a balanced pore structure with a significant volume of micropores and mesopores, optimized for the adsorption of a wide range of organic compounds.

Its robustness and density make it an economical and reliable filtration medium for general treatment applications where consistent performance and a long service life are required.

Technical Specifications

Parameter	Specification	Test Method
Iodine Number	min. 800 mg/g	ASTM D4607
Hardness (Ball-Pan)	min. 95 %	ASTM D3802
Moisture Content (as packed)	max. 5 %	ASTM D2867
Total Ash Content	max. 10 %	ASTM D2866

Typical Physical Properties

Parameter	Typical Value	Test Method
Methylene Blue Number	~ 200 mg/g	ASTM D4607
Specific Surface Area (BET)	~ 850 m^2/g	ASTM D3663 / D6556
Apparent Density	~ 480 kg/m^3	ASTM D2854
pH	8 - 11	ASTM D3838

Typical Applications

Wastewater Treatment: Tertiary treatment for residual COD (Chemical Oxygen Demand) reduction and color removal.

Process Water Treatment: Dechlorination and removal of organic matter to protect downstream equipment (heat exchangers, resins).

Air Treatment (Vapor Phase): General deodorization for pumping stations, waste treatment facilities, and ventilation systems (HVAC).

Aquariums and Fish Farming: Water filtration for the removal of organic impurities and clarity improvement.

Available Particle Sizes

- 4 x 10 mesh (4.75 - 2.00 mm)
- 8 x 16 mesh (2.36 - 1.18 mm)
- 8 x 30 mesh (2.36 - 0.60 mm)
- 12 x 30 mesh (1.70 - 0.60 mm)

BIOX CARBON

OLEASORB GAC-950 S

HIGH ACTIVITY GRANULAR ACTIVATED CARBON
For potable water & gold recovery

Olea Sorb GAC-950 S is a high-activity granular activated carbon manufactured from olive pomace using an advanced steam activation process. This treatment develops a predominantly microporous internal structure, providing superior adsorption capacity for low molecular weight organic compounds.

Its exceptional mechanical hardness, comparable to that of coconut shell-based carbons, minimizes attrition and the generation of fines, ensuring optimal performance in demanding hydraulic circuits such as those in gold mining

Technical Specifications

Parameter	Specification	Test Method
Iodine Number	min. 950 mg/g	ASTM D4607
Hardness (Ball-Pan)	min. 96 %	ASTM D3802
Moisture Content (as packed)	max. 5 %	ASTM D2867
Total Ash Content	max. 6 %	ASTM D2866

Typical Physical Properties

Parameter	Typical Value	Test Method
Methylene Blue Number	~ 220 mg/g	ASTM D4607
Specific Surface Area (BET)	~ 1000 m^2/g	ASTM D3663 / D6556
Apparent Density	~ 440 kg/m^3	ASTM D2854
pH	8 - 11	ASTM D3838

Typical Applications

Potable Water Treatment: Removal of disinfection by-products (Trihalomethanes - THMs). Adsorption of micropollutants, pesticides, and pharmaceutical residues. Dechlorination and removal of tastes and odors (geosmin, MIB).

Precious Metal Recovery (Gold Mining): Excellent performance in Carbon-in-Leach (CIL), Carbon-in-Pulp (CIP), and Carbon-in-Column (CIC) processes due to its high abrasion resistance and rapid adsorption kinetics.

Food and Beverage Industry: Process water purification for the production of beverages, beers, and spirits.

Air Treatment: Removal of volatile organic compounds (VOCs) at low concentrations

Available Particle Sizes

- 8 x 16 mesh (2.36 - 1.18 mm)
- 8 x 30 mesh (2.36 - 0.60 mm)
- 12 x 30 mesh (1.70 - 0.60 mm)

BIOX CARBON

OLEASORB GAC-1000 S

PREMIUM GRANULAR ACTIVATED CARBON
For High Purity Applications

Olea Sorb GAC-1000 S is a premium-grade granular activated carbon with exceptional adsorption activity. Produced through an intensive steam activation of olive pomace, this grade possesses a very high specific surface area and an almost exclusively microporous structure.

This morphology is specifically designed to maximize the adsorption capacity for trace organic contaminants and low molecular weight molecules. Its high purity and mechanical strength make it the preferred choice for critical applications where maximum performance is non-negotiable.

Technical Specifications

Parameter	Specification	Test Method
Iodine Number	min. 1000 mg/g	ASTM D4607
Hardness (Ball-Pan)	min. 97 %	ASTM D3802
Moisture Content (as packed)	max. 5 %	ASTM D2867
Total Ash Content	max. 3 %	ASTM D2866

Typical Physical Properties

Parameter	Typical Value	Test Method
Methylene Blue Number	~ 230 mg/g	ASTM D4607
Specific Surface Area (BET)	~ 1050 m^2/g	ASTM D3663 / D6556
Apparent Density	~ 420 kg/m^3	ASTM D2854
pH	8 - 11	ASTM D3838

Typical Applications

Potable Water Treatment (Critical Applications): Advanced removal of emerging contaminants (PFAS, pharmaceutical residues) and disinfection by-product precursors.

Pharmaceutical and Chemical Industries: Process water purification (purified water), protection of catalysts and resins.

Beverage Industry: Dechlorination and deodorization for mineral waters and sodas, ensuring perfect organoleptic neutrality.

Domestic Filters (Point-of-Use / Point-of-Entry): Use in filter cartridges for maximum adsorption performance

Gold Recovery (Complex Ores): Recommended for low-grade ores or those with a "preg-robbing" effect, where high adsorption kinetics and capacity are crucial

Available Particle Sizes

- 6 x 12 mesh (3.36 - 1.68 mm)
- 8 x 30 mesh (2.36 - 0.60 mm)
- 12 x 30 mesh (1.70 - 0.60 mm)

BIOX CARBON

FILTRA GREEN

POWDERED ACTIVATED CARBON FROM OLIVE POMACE

The Filtra Green range is a series of high-performance powdered activated carbons (PAC) manufactured exclusively from olive pomace. Our steam activation process, followed by precision milling, produces a fine powder with a large specific surface area and rapid adsorption kinetics.

Filtra Green is designed to be dosed directly into liquids for treatment. Its ability to quickly adsorb a wide range of molecules makes it an effective and economical solution for batch treatment, management of pollution peaks, and decolorization applications.

Typical Applications

Potable Water Treatment: Seasonal treatment for pesticide and metabolite peaks. Removal of taste and odor compounds. Decolorization of raw water.

Wastewater Treatment: Removal of hardly biodegradable COD (Chemical Oxygen Demand). Removal of colorants and toxic compounds.

Food, Beverage, and Chemical Industries: Decolorization of syrups, oils, or chemical solutions. In-process purification of products.

Features and Benefits

100% Plant-Based Raw Material: Derived from the valorization of olive pomace, a renewable and sustainable resource.

Rapid Adsorption Kinetics: The fine particle size ensures optimal contact and rapid removal of contaminants.

High Efficiency: Highly effective for the removal of tastes and odors (geosmin, MIB), colors, and organic micropollutants.

Excellent Dispersibility: Mixes easily and uniformly in liquids.

High Purity: Produced via a purely thermal process, without solvents or chemical additives.

Controlled Quality: All parameters are rigorously tested according to international ASTM standards.

BIOX CARBON

Technical Specifications

Parameter	Specification	Test Method
Iodine Number	800 - 1200 mg/g	ASTM D4607
Moisture Content (as packed)	≤ 5 %	ASTM D2867
Total Ash Content	≤ 6 %	ASTM D2866

Typical Physical Properties

Parameter	Typical Value	Test Method
Specific Surface Area (BET)	800 - 1200 m^2/g	ASTM D3663 / D6556
Apparent Density	430 - 580 kg/m^3	ASTM D2854
pH	4 - 11	ASTM D3838
Methylene Blue Number	200 - 250 mg/g	ASTM D4607
Appearance	Fine black powder	Visual
Odor	Odorless	Organoleptic

Available Particle Sizes

We offer several milling fineness grades to optimize kinetics and filtration depending on the application:

- Standard: < 200 mesh (≥ 90 % passing 0.075 mm)
- Fine: < 325 mesh (≥ 90 % passing 0.045 mm)

Packaging

- 25 kg multi-wall paper bags on pallets
- 500 kg polypropylene FIBCs (big bags) with a polyethylene inner liner

Storage

Store in a dry, well-ventilated area, away from direct sunlight, heat sources, and oxidizing agents.
Keep in the original sealed packaging to prevent moisture re-adsorption.

Safety and Handling

Activated carbon is a safe product. However:

- Wet activated carbon can deplete oxygen in confined spaces.
- Always follow safety procedures when working in potentially oxygen-deficient atmospheres.
- Avoid inhaling dust during handling.
- A Safety Data Sheet (SDS) is available upon request.

BIOX CARBON

FILTRA GREEN PAC-800 S

POWDERED ACTIVATED CARBON
For Effluent Treatment

Filtra Green PAC-800 S is a powdered activated carbon produced by steam activation of olive pomace, followed by precision milling to achieve a standard particle size. Designed to be dosed directly into liquid streams, this product offers rapid adsorption kinetics and a good retention capacity for a wide range of organic molecules.

It is an economical and effective solution for batch treatments, managing seasonal pollution, and improving the quality of industrial and municipal effluents.

Technical Specifications

Parameter	Specification	Test Method
Iodine Number	min. 800 mg/g	ASTM D4607
Moisture Content (as packed)	max. 8 %	ASTM D2867
Total Ash Content	max. 6 %	ASTM D2866

Typical Physical Properties

Parameter	Typical Value	Test Method
Methylene Blue Number	~ 210 mg/g	ASTM D4607
Specific Surface Area (BET)	~ 850 m^2/g	ASTM D3663 / D6556
Apparent Density	~ 560 kg/m^3	ASTM D2854
pH	8 - 11	ASTM D3838

Typical Applications

Wastewater Treatment:
Reduction of COD and color in industrial effluents. Removal of nitrification inhibitors in biological treatment plants.

Potable Water Treatment:
Management of seasonal taste and odor peaks (algae). Partial removal of pesticides during accidental pollution events.

Chemical Industry:
General purification and decolorization of intermediate chemical products.

Available Particle Sizes

- Standard (S) : > 90% < 200 mesh (0.075 mm)

BIOX CARBON

FILTRA GREEN PAC-950 F

HIGH PURITY POWDERED ACTIVATED CARBON
For Food & Pharma

Filtra Green PAC-950 F is a high-performance powdered activated carbon characterized by high adsorption activity and a fine particle size. Obtained through an advanced activation of olive pomace, this grade is specifically designed for purification applications where maximum efficiency and rapid kinetics are paramount.

Its pore structure, rich in mesopores and micropores, is particularly effective for decolorization and the removal of organic impurities in the food, beverage, and pharmaceutical industries.

Technical Specifications

Parameter	Specification	Test Method
Iodine Number	min. 950 mg/g	ASTM D4607
Moisture Content (as packed)	max. 8 %	ASTM D2867
Total Ash Content	max. 5 %	ASTM D2866

Typical Physical Properties

Parameter	Typical Value	Test Method
Methylene Blue Number	~ 240 mg/g	ASTM D4607
Specific Surface Area (BET)	~ 1000 m^2/g	ASTM D3663 / D6556
Apparent Density	~ 450 kg/m^3	ASTM D2854
pH	8 - 11	ASTM D3838

Typical Applications

Food and Beverage Industry: Decolorization of sugar syrups (glucose, fructose), glycerin, and edible oils. Purification of organic acids (citric acid, lactic acid). Color adjustment and removal of off-tastes in fruit juices and alcoholic beverages.

Pharmaceutical Industry: Purification of active pharmaceutical ingredients (APIs) and synthesis intermediates. Removal of colors and impurities in antibiotics and vitamins.

Water Treatment: Removal of persistent organic pollutants at low concentrations.

Available Particle Sizes

- Fine (F) : > 90% < 325 mesh (0.045 mm)

BIOX CARBON

OUR APPLICATIONS

ACTIVATED CARBON SOLUTIONS FOR EVERY INDUSTRY

Activated carbon is an essential purification agent, indispensable in countless industrial and environmental processes. Thanks to their unique and sustainable raw material (olive pomace) and a mastered steam activation process, our Olea Sorb (Granular) and Filtra Green (Powdered) ranges offer exceptional performance in the most demanding applications.

OLEASORB FILTRA GREEN

Our expertise allows us to provide customized solutions that meet the specific challenges of each sector, ensuring optimal purity, efficiency, and cost-effectiveness. Discover how our products can improve your processes.

- **Water Treatment:** Advanced solutions to ensure clean and safe water, from municipal treatment to industrial process water.
- **Gold Recovery:** Premium-grade activated carbon, designed for optimal adsorption and maximum resistance in gold extraction circuits.
- **Air and Gas Treatment:** Effective removal of pollutants, odors, and volatile organic compounds (VOCs) from air and industrial gas streams.
- **Food and Beverage:** Improvement of quality, taste, and safety in food and beverage manufacturing processes.
- **Food and Beverage:** Improvement of quality, taste, and safety in food and beverage manufacturing processes.
- **Pharmaceutical and Chemical Industries:** High-purity activated carbon for compound purification, decolorization, and solvent recovery.

BIOX CARBON

WATER TREATMENT

OLEASORB FILTRA GREEN

Potable Water Purification : Activated carbon plays an essential role in providing safe, high-quality drinking water. Whether the need is aesthetic (taste, odor), regulatory, or related to emerging contaminants, our products offer a reliable protective barrier. The Olea Sorb and Filtra Green ranges improve drinking water quality by removing :

- Taste and odor compounds (geosmin, 2-Methylisoborneol - MIB).
- Pesticides and their metabolites.
- Organic matter (TOC) and disinfection by-product (DBP) precursors, such as trihalomethanes (THMs).
- Algal toxins (cyanotoxins).
- Synthetic chemicals, such as PFAS.
- Volatile organic compounds (VOCs).
- Endocrine disrupting compounds (EDCs), pharmaceuticals and personal care products (PPCPs).

Recommended Products:

- Olea Sorb GAC-1000 S,
- Olea Sorb GAC-950 S,
- Filtra Green PAC-950 F (for seasonal treatments).

Municipal Wastewater Treatment: The treatment of municipal wastewater requires the removal of micropollutants before discharge into the environment. Activated carbon is a proven polishing technology (tertiary or quaternary treatment) to capture persistent organic contaminants that are not removed by biological treatments. Our Olea Sorb and Filtra Green carbons significantly reduce the concentrations of these pollutants, allowing for safe water discharge.

- Organic matter (COD).
- Pharmaceuticals (carbamazepine, diclofenac, etc.).
- Personal care products (PPCPs).
- Hormones and other endocrine disrupting compounds (EDCs).

Recommended Products:

- Olea Sorb GAC-800 S,
- Filtra Green PAC-800 S

Industrial Wastewater Treatment and Reuse: Each industry generates specific effluents, often containing a complex mixture of pollutants. Before being discharged or reused ("water reuse" processes), this water must be treated to remove toxic compounds. Activated carbon is a flexible and effective solution for treating these effluents. Our products can remove:

- Organic matter (COD).
- BTEX (benzene, toluene, ethylbenzene, and xylene).
- Phenols.
- Colorants.
- AOX (Adsorbable Organic Halides).
- Pesticides and surfactants.

Recommended Products:

- Olea Sorb GAC-800 S,
- Filtra Green PAC-800 S

Landfill Leachate Treatment: Leachate, the liquid that percolates through landfill sites, is a highly complex and concentrated effluent. Activated carbon is a key treatment step for removing persistent organic pollutants before final discharge. Olea Sorb carbon can reduce levels of :

- Organic matter (COD).
- PFAS (Per- and Polyfluoroalkyl Substances).
- Colors and toxic compounds

Recommended Product :

- Olea Sorb GAC-800 S

Process Water: Many industries (food and beverage, chemical, etc.) require high-purity water for their manufacturing processes. Activated carbon is an indispensable step to protect sensitive equipment like reverse osmosis membranes or ion exchange resins. Olea Sorb carbons effectively remove:

- Chlorine and chloramines.
- THMs (trihalomethanes).
- Organic pollutants that could foul the equipment

Recommended Product :

- Olea Sorb GAC-1000 S

Pool Filters: Activated carbon is used in swimming pool filtration systems, especially those treated with ozone, to ensure the highest quality bathing water. It protects swimmers by removing disinfection by-products. Olea Sorb carbon can remove:

- Excess oxidizing agents (ozone, chlorine).
- Ozonation by-products.
- Trihalomethanes (THMs) and chloramines.
- Tastes and odors.

Recommended Product :

- Olea Sorb GAC-950 S,

Soil and Groundwater Remediation: The pollution of soil and groundwater from past industrial or agricultural activities requires robust remediation solutions. Groundwater treatment via pump-and-treat with granular activated carbon filtration is a standard and effective method. The Olea Sorb range can remove :

- Volatile organic compounds (VOCs).
- BTEX (benzene, toluene, ethylbenzene, xylenes).
- MTBE (Methyl tert-butyl ether).
- PFAS.
- PAHs (Polycyclic Aromatic Hydrocarbons).
- TCE (trichloroethylene) and PCE (perchloroethylene).

Recommended Product :

- Olea Sorb GAC-950 S

Aquarium and Pond Filters: Water filtration is vital for maintaining a healthy environment for aquatic life. High-quality activated carbon helps keep water clear and free of harmful compounds. Our Olea Sorb carbon, thanks to its purity and hardness, is an excellent choice for filter manufacturers. It can remove :

- Decomposing organic matter.
- Tannins that cause yellow water discoloration.
- Colors and odors.
- Residual chlorine and chloramines

Recommended Product :

- Olea Sorb GAC-800 S

FOOD AND BEVERAGE

OLEASORB FILTRA GREEN

Food and beverage production is one of the most strictly regulated industries in the world. It is vital that public health is the top priority for producers and that all potentially hazardous pollutants and impurities are eliminated. The use of activated carbon is a prime solution not only for removing contaminants but also for controlling the color, taste, and odor of finished products.

Food and beverage production is one of the most strictly regulated industries in the world. It is vital that public health is the top priority for producers and that all potentially hazardous pollutants and impurities are eliminated. The use of activated carbon is a prime solution not only for removing contaminants but also for controlling the color, taste, and odor of finished products.

Our solutions allow for :

- Removal of undesirable colors, tastes, and odors.
- Elimination of pollutants and process by-products.
- Highest-level purification of process water for beverage production.
- Providing a reliable, cost-effective, and sustainable solution.

Edible Oils: Activated carbon is widely used in the purification of edible oils (olive, rapeseed, sunflower, etc.). It effectively corrects color while removing toxins and pollutants such as polycyclic aromatic hydrocarbons (PAHs), which can form during pressing or refining processes. Our powdered activated carbon, with its optimized pore structure, offers cutting-edge performance for this application

- Contaminants removed: Color bodies, PAHs (e.g., Benzo[a]pyrene), taste precursors

Recommended Product :

- Filtra Green PAC-950 F

Brewing, Bottling, and Carbonated Beverages: To guarantee consistent and impeccable quality, the water used to produce beer, bottled water, and carbonated beverages is systematically treated with activated carbon. Our granular products, used in fixed-bed filters, constitute an indispensable safety barrier for process water quality. They effectively remove:

- Chlorine and chloramines.
- Disinfection by-products (THMs).
- Organic pollutants.
- Tastes and odors.
- Undesirable trace compounds (pesticides, etc.).

Recommended Products :

- Olea Sorb GAC-1000 S,
- Filtra Green PAC-950 F

Fruit Juices: In the production of fruit juices, particularly concentrates, activated carbon is an essential purification agent. It is used for decolorization, final color adjustment, and the removal of undesirable compounds that can appear during fruit processing. Our high-performance powdered carbon is particularly effective for :

- Decolorization of light and dark juices.
- Removal of undesirable by-products like HMF (Hydroxymethylfurfural).
- Removal of patulin (a mycotoxin).

Recommended Product: :

- Filtra Green PAC-950 F

Organic Acids (Citric Acid, Lactic Acid): Citric acid and lactic acid are often produced through fermentation processes that can generate impurities and colored compounds. Activated carbon is used in the final purification step to decolorize the raw solution and ensure the final product meets the strictest food-grade quality standards

Recommended Product :

- Filtra Green PAC-950 F (batch treatment)

Glycerin: Activated carbon meets several needs in glycerin purification. It is used to remove coloration and undesirable by-products, which helps to stabilize the final product and control its aging

Recommended Products :

- Olea Sorb GAC-950 S,
- Filtra Green PAC-950 F

Sweeteners: Our activated carbons are highly effective for the purification of various sweeteners, where decolorization is a critical step in the process. They remove colors and undesirable by-products formed during production, ensuring a high-purity final product. Applications includ :

- Cane sugar.
- Glucose.
- Fructose syrups

Recommended Products :

- Filtra Green PAC-950 F (batch treatment)
- Olea Sorb GAC-950 S (fixed-bed treatment).

Gelatin and Monosodium Glutamate (MSG): The production of gelatin (a thickening agent) and MSG (a flavor enhancer) involves processing steps that can generate colors and odors. Powdered activated carbon is used for the deodorization and decolorization of these products, ensuring their neutrality and purity.

Recommended Product :

- Filtra Green PAC-950 F

PHARMACEUTICAL AND CHEMICAL INDUSTRIES

Activated carbon is widely used for purification in the production of a vast range of industrial chemicals and pharmaceutical compounds. Typical applications include the purification of amino acids, glycerin, mineral acids, and active pharmaceutical ingredients (APIs). Solvent recovery is also an important application. Our carbons are used either in powdered form (PAC), dosed in a batch process, or in granular form (GAC) in a fixed-bed adsorber.

API and Chemical Purification: As an important tool for the purification of intermediates and finished products, activated carbon has a very high adsorption capacity for a wide range of molecules, from odorous compounds to dark-colored bodies. It is often used in the final polishing step to remove residual color and impurities.

Recommended Product :

- Filtra Green PAC-950 F

OLEASORB

FILTRA GREEN

ENERGY AND STORAGE

High-purity activated carbon is a critical component in the development of advanced energy storage technologies. Its exceptionally high specific surface area, electrical conductivity, and controlled pore structure make it a material of choice for manufacturing high-performance electrodes.

In the field of energy storage, the cleanliness and morphology of the carbon are paramount. Our activated carbons, derived from a pure thermal activation process, offer very low ash and impurity content, which is essential for ensuring the longevity and efficiency of energy storage devices

Supercapacitors (Ultracapacitors): Supercapacitors store energy via the electrostatic accumulation of ions at the interface between an electrode and an electrolyte. The performance of these devices is directly related to the accessible surface area of the electrodes. Our high-activity powdered activated carbon, with its highly developed specific surface area, maximizes the energy and power density of supercapacitors while ensuring excellent stability over thousands of charge/discharge cycles

Recommended Product :

- Filtra Green PAC-950 F

AIR AND GAS TREATMENT

Global urban and industrial growth has made air purification an increasing priority. To combat the rise of airborne contaminants, we supply high-performance activated carbons for various air and gas purification needs. These solutions are designed to comply with emissions control regulations by effectively removing odors, volatile organic compounds (VOCs), and chemicals from air and gas streams. Our solutions address a variety of needs, including industrial waste gas treatment, solvent recovery, carbon dioxide (CO_2) purification, and biogas treatment

Industrial Air and Gas Treatment: Industrial processes emit fumes and volatile organic compounds (VOCs) that must be captured to comply with environmental regulations. Our Olea Sorb granular activated carbon is ideal for these fixed-bed applications.

Recommended Product :

- Olea Sorb GAC-800 S

Solvent Recovery: Industries such as printing or adhesive manufacturing use organic solvent vapors. Our granular activated carbon is designed to efficiently adsorb these solvents, allowing for their recovery and reuse, which reduces costs and environmental impact.

Recommended Product :

- Olea Sorb GAC-950 S

GOLD RECOVERY

Activated carbon for gold recovery is specifically designed for Carbon-in-Pulp (CIP), Carbon-in-Leach (CIL), and Carbon-in-Column (CIC) processes. Our products are manufactured under carefully controlled activation conditions and undergo post-activation treatments that ensure a precise and consistent particle size distribution, high particle density and hardness, and an optimal surface area for gold adsorption.

This exclusive production process and attention to carbon quality guarantee top-tier performance in gold mines by minimizing carbon losses in the circuit due to attrition and by offering the best gold adsorption kinetics and loading capacity

LThe Olea Sorb Solution: Manufactured under strictly controlled conditions, our activated carbons feature a consistent particle size distribution, an optimal pore network for maximum gold adsorption performance, and a long service life in the gold circuit. The exceptional hardness of our olive pomace-based carbon provides abrasion resistance that rivals the best raw materials, reducing fines losses and, consequently, gold losses

Recommended Products :

- Olea Sorb GAC-1000 S (for complex ores),
- Olea Sorb GAC-950 S (industry standard)

BIOX CARBON

FASTLITE

QUICK-LIGHT CHARCOAL BRIQUETTES FOR INCENSE

FASTLITE is a range of premium quick-light charcoal briquettes designed to offer an unparalleled user experience. Produced from pure olive pomace charcoal, our briquettes incorporate an advanced lighting formula that ensures instant and safe ignition with a single flame.

Each briquette is pressed to an optimal density, ensuring a long burn time and intense, consistent heat. FASTLITE is the ideal solution for incense users seeking the performance of natural charcoal without the waiting time.

Typical Applications

- Hookah / Shisha
- Burning incense and aromatic resins
- Ritual and traditional uses

Instructions for Use

1. Using tongs, hold one FASTLITE tablet. Never hold the tablet in your hand when lighting.
2. Bring a flame (lighter, match) to the edge of the tablet. The ignition will spread across the entire surface in a few seconds.
3. Wait until the sparking and crackling stops and a thin layer of gray ash covers the tablet.
4. Place the tablet on a suitable incense burner.

Features and Benefits

Instant Ignition: Lights in seconds with a simple lighter or match. No need for electric equipment, allowing for easy use in any situation.

Long Burn Time: Designed to last, each tablet offers up to 45 minutes of stable combustion, allowing you to fully enjoy your session without interruption.

Intense and Consistent Heat: Provides high, uniform heat, essential for perfect heating and optimal diffusion of incense aromas

Pure and Clean Experience: Our charcoal is odorless and free of any parasitic taste, thus preserving the authenticity of your aroma's flavors. It produces a distinctive light beige ash in small quantities, testifying to the purity of its composition

Ease and Safety of Use: The tablets are compact, clean to handle, and designed not to crumble. The lighting formula is controlled to prevent excessive sparks.

BIOX CARBON

Technical Specifications

Parameter	Specification
Raw Material	Olive Pomace Charcoal
Shape	Disc (Round tablet)
Diameter	∅ 33 mm
Ignition Time	< 30 seconds
Burn Time	Up to 45 minutes
Fixed Carbon Content	~75 %
Ash Content	< 4 %
Ash Color	Light beige / White
Moisture Content (as packed)	< 5 %
Odor	Odorless

Safety and Handling

- **WARNING: CARBON MONOXIDE HAZARD:** Burning charcoal gives off carbon monoxide, an odorless, dangerous gas. Use only in well-ventilated areas. Never use inside a home, tent, or vehicle.
- Ensure ashes are completely cool before disposing of them.
- Keep out of reach of children.

Packaging

- Rolls of 10 tablets, sealed in an airtight foil wrap to preserve freshness and lighting efficiency.
- Boxes of 60 rolls (600 tablets).

Storage

To ensure optimal performance, store in a dry place, away from humidity and heat sources. Once a roll is opened, it is recommended to store it in an airtight container

BIOX CARBON

TERROLYVE

REGENERATIVE SOIL AMENDMENT FROM OLIVE POMACE

Terrolyve is a very high-quality biochar produced by the controlled pyrolysis of rigorously selected olive pomace. Stemming from our circular economy approach, this 100% natural vegetable charcoal is designed to sustainably restore and improve the fertility, structure, and resilience of all soil types.

Thanks to its unique porous structure and high stable carbon content, Terrolyve acts as a veritable sponge for nutrients and water, while providing an ideal habitat for soil microbial life. It is the ultimate sustainable solution for more productive, resource-efficient, and environmentally friendly agriculture.

Typical Applications

- Agriculture and Market Gardening: Improves yields, crop quality, and overall soil health.
- Arboriculture and Viticulture: Enhances the establishment of young plants and the vigor of trees and vines.
- Horticulture and Nurseries: Integration into potting soils and substrates for healthier, more robust plants.
- Green Spaces and Sports Fields: Improves lawn resilience to drought stress and foot traffic.
- Environmental Management: Rehabilitation of degraded or contaminated soils.

Features and Benefits

Improves Soil Structure: Its granular structure lightens heavy, clay soils and increases the cohesion of sandy soils, promoting better aeration and deep rooting of crops

Increases Water Retention: Significantly reduces irrigation needs by storing water in its porous matrix, releasing it to plants as needed.

Optimizes Long-Term Fertility: Thanks to its high exchange capacity, it captures and retains essential nutrients (nitrogen, phosphorus, etc.), limiting fertilizer leaching and making them available to plants over several years

Stimulates Biological Activity: Provides a protective habitat for beneficial microorganisms (bacteria, mycorrhizae), creating a rich and dynamic subterranean ecosystem.

Natural pH Regulator: Its alkaline pH (~8.7) helps to correct soil acidity, improving nutrient uptake by plants

Durable Carbon Sequestration: Every kg of Terrolyve incorporated into the soil stores carbon in a stable form for hundreds of years, actively contributing to the reduction of greenhouse gases.

BIOX CARBON

Technical Specifications

Physico-chemical characteristic	Value
Carbon content (C)	~ 73,5 % (100% vegetal)
pH	~ 8,7
Ash content	~ 10,6 %
Apparent Density	~ 598 kg/m³
Moisture content (as packaged)	< 4 %
Volatile matter	~ 14,9 %
Electrical conductivity	< 0.01 mS/cm

Instructions for Use

1. **Preparation:** For optimal results, it is advisable to "charge" or "activate" the biochar before application. Mix Terrolyve with mature compost, manure, or an organic fertilizer and let it rest for 2 to 3 weeks, keeping it slightly moist.
2. **Incorporation:** Apply the mixture to the surface and incorporate it into the top 15-20 cm of soil using a tilling tool.
3. **Indicative Dosage:**

- Gardens and vegetable plots: 0.5 to 1 kg per m2.
- Potting soils and substrates: Mix in at a rate of 5% to 10% of the total volume.
- Planting trees/shrubs: Mix 1 to 2 kg with the soil from the planting hole

Safety and Handling

Terrolyve is a natural, stable, and non-toxic product. It is recommended to wear a dust mask during handling to avoid inhaling fine particles. In case of eye contact, rinse thoroughly with clean water

Packaging

- 25 kg bags
- 500 kg FIBCs (big bags)

Storage

Store in a dry, ventilated area to preserve product integrity. Avoid direct contact with moisture before use in the field

BIOX CARBON

OUR TRUSTED PARTNERS

الجزائرية للمياه

FOREMHYD Spa

amenhyd.Spa

SOGERHWIT

Alphyt

Hydrosid

GERHYD

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