ALL POWER LABS

Carbon Negative Power & Products

POWDERED ACTIVATED CARBON (PAC)

STEAM ACTIVATED & SUITABLE FOR WATER TREATMENT

At All Power Labs, we produce high-performance activated carbon designed for exceptional adsorption capabilities. With a high iodine number, our carbon boasts a large surface area and extensive micro-porosity, making it ideal for removing contaminants, impurities, and unwanted compounds. Our material also excels in methylene blue absorption, a key indicator of its efficiency in capturing organic molecules and dyes from solutions.
Whether for industrial filtration, environmental remediation, or advanced chemical processes, All Power Labs' activated carbon delivers excellent purity and adsorption power, ensuring reliability and sustainability in these and other potential applications:

- Wastewater Remediation
- Toxicity reduction – landfill leachate
- Groundwater
  - Arsenic As(III)/As(V)
  - Nucleotides
  - Uranium
- Watershed protection and potable water treatment
  - Agricultural runoff
  - Stormwater filtration
  - Pesticides/Herbicides
- Aquariums / Aquaculture
  - Organic pollutants (Fish food, waste, color, etc.)
  - Ammonium

APL's activated carbon is produced from locally sourced waste biomass such as wood chips and nutshells making it a sustainable product using 100% domestic content. A gasification-based, US-designed and manufactured technology is used for all of our activated carbon production.
Rigorous quality control is achieved with real-time MRV integrated into our production equipment, along with post-production testing of every batch of activated carbon we produce.

ABOUT ALL POWER LABS

APL is based in Berkeley, CA and has been developing and manufacturing biomass gasification equipment for the last 15 years. APL's proprietary technology is designed for scalable and resilient supply though localized, distributed-scale production with standardized systems enabling rapid deployment to qualified sites. APL's commitment to climate solutions in all of our products means that our high-quality carbon has been developed with waste reduction, renewable energy, and minimized climate impacts as essential elements in every aspect of our process.

SPECIFICATIONS	
Iodine Number	700 mg/g (minimum)
Effective Particle Size	150 µm
Moisture Content	8% max

TYPICAL PROPERTIES	
Methylene Blue Adsorption	11% (by mass)
Surface Area (BET)	790 m^2/g
Apparent Density	0.13 g/mL 8 lb/ft^3
Density	10-21 lb/ft^3
pH	Alkaline
Moisture (as packed)	1-2% (by mass)
Food Chemicals Codex	Pass
Meets AWWA standards: (American Water Works Association)	B600-24

NOTES

1. All analyses based on standard test methodologies for: Iodine Number, Methylene Blue Adsorption, Moisture Content, and BET Surface Area.
2. Properties for general information only, not as purchase specifications.
3. Any specification given was valid at time of issuance of the publication. However, we maintain a policy of continuous development and reserve the right to amend any specification without notice.

PACKAGING/TRANSPORTATION:
Variety of packaging options available. Activated carbon (not regulated)
Exempt from DOT, IATA, and IMDG regulations
Import/Export classification: 3802.10.0000 (HS Tariff Classification)
Domestic Freight Classification: NMFC 040560
CAS # 7440-44-0

MATERIAL HANDLING:
Wet activated carbon depletes oxygen from air and, therefore, dangerously low levels of oxygen may be encountered. Whenever workers enter a vessel containing activated carbon, the vessel's oxygen content should be determined and work procedures for potentially low oxygen areas should be followed. Appropriate protective equipment should be worn. Avoid inhalation of excessive carbon dust. No problems are known to be associated in handling this material. This product may contain silica. Please see the product Material Safety Data Sheet for details. Long-term inhalation of high dust concentrations can lead to respiratory impairment. Use forced ventilation or a dust mask when necessary for protection against airborne dust exposure (see Code of Federal Regulations Title 29, Subpart Z, par. 1910.1000, Table Z-3).

ALL Power Labs - 1010 Murray Street Berkeley, CA 94710 U.S.A.
+1-888-252-5324 Email: sales@allpowerlabs.com Web: allpowerlabs.com