# Creat Lead

# **Activated Carbon**



Henan Creat Lead Industrial Technology Co., Ltd specialize in the production of wood/coal columnar activated carbon, coal-based powdered carbon, mango shell activated carbon, fruit shell activated carbon, coal-based granular activated carbon, wood-based powdered activated carbon, air purification activated carbon and other types of activated carbon. The activated carbon and desulfurizing agent water purification carbon produced by the company adopt national standards and are widely used in the desulfurization of industrial gas sources such as chemical fertilizers, synthetic ammonia, urea, methanol, flue gas, various coal gases, air purification, and the early stage of industrial water and domestic water. Treatment, deep purification treatment of industrial wastewater and domestic sewage; decolorization and refining of drugs and pharmaceutical industry, etc.

Our Activated Carbon is a high purity form of carbon with a very high surface area, characterized by microscopic pores, generally manufactured from carbonaceous raw materials such as high quality coals, coconut shells or wood, although other raw materials are constantly being investigated and developed. Our Activated Carbons is proud to be able to offer many different types of activated charcoal carbon.

The raw material is charred, in the absence of oxygen, before it undergoes an activation process that opens up the microscopic pore structure and imparts the huge surface area required for purification applications. Then the activation process is normally performed in a high temperature kiln in the presence of steam, although other techniques are utilized within the carbon industry, for example activation with acidic chemicals. Finally, It is the huge surface area of activated carbon that makes it suitable for removing unwanted impurities from liquid and gas phase streams, in a process called *adsorption*.



- 工业废气处理 Gas Purification
- 有机溶剂回收 Organic solvent recycling
- 除甲醛除味 Formaldehyde removal and odor removal
- 脱硫脱硝 Desulfurization and denitrification
- 脱氨除臭 Deamination and deodorization
- 饮用水净化 Drinking water purification
- 生活污水工程 Sewage project
- 防毒面具口罩 gas mask
- 吸附塔过滤罐 adsorption tower filter tank
- 废水污水处理 wastewater sewage treatment
- 喷漆房吸附 Spray booth adsorption



# Wooden Columnar Activated Carbon (Charcoal)



It is made from sawdust, shells etc as raw materials, which are crushed, mixed, squeezed, molded, dried, carbonized and activated. Smooth appearance, high strength and few impurities. Applicable to desulfurization, air purification, Exhaust gas treatment, adsorption and deodorization, multi-purpose use.

粒径 Partical size	4mm	6mm	8mm	1.5mm	
比表面积m3/g Specific surface area					
水分% moisture		<b>\(\left\)</b>	3		
强度% Strength	≥ 90				
水容% Soluble	55-60				
装填密度g/ml Bulk Density	0.52-0.6				
PH值 PH Value		6-	-8		

# **Coal Columnar Activated Carbon.**



It is made of high-quality Taixi coal and coal tar as raw materials and advanced process equipment. Has a large specific surface area and pores

It is well developed, has high wear resistance, can withstand high temperature and high pressure, is not easily broken, easily regenerated, and long working life. Suitable for sewage treatment in environmental protection industry,

Exhaust gas and gas purification, and recovery of organic solvents such as benzene, xylene, ethanol, gasoline, trichloromethane, carbon disulfide, etc.

	粒径 Partical size	1.5 mm	2 mm	3 mm	4 mm	6 mm
	碘吸附值 mg/g lodine value			700 - 1100		
	四氯化碳值 % carbon tetrachloride (CTC)			35 - 80		
	比表面积 m3/g Specific surface area			750 - 1200		
	水分 % moisture			≤ 3		
	强度 % Strength			≥ 95		
	灰分 % Ash			12		
ě	装填密度 g/ml Bulk Density			0.42 - 0.55		
	PH值 PH Value			7 10		

# **Coal Columnar Activated Carbon 1.5mm**



Coal-based columnar activated carbon 1.5mm: refined through grinding-kneading-forming- carbonization and steam activation in SLEP furnace. Ultralow ash, clean and dust-free, strong adsorption capacity, high mechanical strength, well-developed pores and other advantages. Widely used in tap water, drinking water filtration and impurity removal, air purifiers, carbon bags, gas mask protection, etc.

粒径 Partical size	1.5 mm
碘吸附值 mg/g lodine value	800 - 1100
四氯化碳值 % carbon tetrachloride (CTC)	40 - 80
比表面积m3/g Specific surface area	850 - 1200
水分% moisture	≤ 3
强度% Strength	≥ 90
灰分 % Ash	12
装填密度g/ml Bulk Density	0.45 - 0.56
PH值 PH Value	7 10

#### **Activated Carbon Oil Absorbent 6mm**



Activated carbon oil absorbent 6mm black columnar particles in appearance, the main component is activated carbon with special active agent add. Performance characteristics and uses. It has a strong adsorption effect and can remove oil, hydrogen sulfide, benzene, acetate and other impurities. It is easy to dispose of after disposal. according to Oil-absorbing environments generally contain liquid water. We use new molding methods and good binders to improve the strength and adsorption performance of activated carbon.

粒径 Partical size	Ø (6-8) xL(6-18)
比表面积m3/g Specific surface area	450-550
水分% moisture	≤ 3
强度% Strength	≥ 90
水容% Soluble	50-55
装填密度g/ml Bulk Density	0.55-0.60
吸油率 % Oil absorption rate	≥ 36



### **Powdered Activated Carbon.**



**Powdered activated carbon**. Produced through a unique process, it appears as a fine black powder, odorless, with a wide pore structure, large adsorption capacity, strong decolorization and deodorization capabilities, and high purity. It is mainly used in waste incineration plants for tail gas purification. It has a significant effect on reducing COD in wastewater and sewage. It also has extensive advantages in decolorization and deodorization.

目数 Mesh	200 mesh	250 mesh	300 mesh
碘吸附值 mg/g Iodine value		800 - 1000	
比表面积m3/g Specific surface area		850 - 1100	
水分% moisture		10 15	
亚甲基蓝吸附值 ml/0.1 Methylene blue adsorption value		10 14	
A法焦糖脱色率 % decolorization rate		105 130	
PH值 PH Value		2.5 7	
灰分 % Ash		5 10	
通过率 Passing Rate		≥ 90	

# **Coconut Shell Activated Carbon**



**Coconut shell activated carbon**: made from high-quality coconut shells through carbonization, activation and fine processing. The appearance is black granular, with large specific surface area, well-developed pores, fast adsorption speed, high strength, regeneration, durability and complete specifications. Suitable for: purification, removal of turbidity and impurities in pure water, improvement of taste, etc. Wine making, industrial water purification, gold refining, air deodorization, etc.

目数 Mesh	4-8, 6-12, 8-16, 10-20, 12-24, 20-40
碘吸附值 mg/g lodine value	700 - 1100
比表面积m3/g Specific surface area	800 - 1200
水分% moisture	≤ 5
强度% Strength	≥ 95
灰分 % Ash	12
装填密度g/ml Bulk Density	0.46 - 0.58
PH值 PH Value	6 9

## **Coal Crushed Charcoal**



Coal Crushed charcoal. It is made of environmentally friendly natural coal and has a black granular appearance. It has strong adsorption capacity, excellent mechanical strength and fast filtration speed. Applicable to Drinking water purification, chlorine removal, water purifier equipment, filter core carbon filling. It can also reduce COD, pigments and other harmful impurities in industrial wastewater and sewage. It also has significant effects on exhaust gas treatment and air purification.

目数 Mesh	4-8, 6-12, 8-16, 30-60
碘吸附值 mg/g Iodine value	500 - 1000
比表面积m3/g Specific surface area	600 - 1100
水分% moisture	≤ 5
强度% Strength	≥ 90
灰分 % Ash	15
装填密度g/ml Bulk Density	0.50 - 0.65

### **Activated Alumina**



Activated alumina. It has a pure white round spherical appearance with a large surface area, uniform particle size, smooth surface, high mechanical strength, good thermal stability, and strong hygroscopicity. It absorbs water without swelling, cracking, or deformation, and is easy to regenerate. Applicable to: adsorbents and desiccants in the chemical, petrochemical and natural gas industries. It can also be used as fluoride remover, water purifier, air compressor, catalyst and catalyst carrier.

粒径 Partical size	3 5 mm	4 6 mm	6 8 mm
Al2O3 %		≥ 92	
比表面积m3/g Specific surface area		≥ 300	
孔容cm3/g Pore volume		≥ 0.4	
破碎强度N/粒 crushing strength		≥ 130-150	
堆密度g/ml Density		0.66-0.79	
烧灼减量% loss of ignition		≤ 0.7	
Fe2O3 %		≤ 0.02	
Na20 %		≤ 0.3	
静态吸附容量%			
adsorption capacity		17	
磨耗% abrasion		≤ 0.15	



# **Nutshell Activated Carbon**



Nutshell activated carbon is produced from high-quality environmentally friendly peach shells, walnut shells, apricot shells, date shells and other raw materials. It has high durability, developed pores, good adsorption performance and low moisture. widely used in. Heavy Metal purification, deodorization and chlorine removal of drinking water, beverages, alcohol and industrial sewage. Vapor phase adsorption and purification of industrial harmful gases.

目数 Mesh	2-4, 4-8,6-10,10-20
碘吸附值 mg/g Iodine value	800 - 1000
比表面积m3/g Specific surface area	800 - 1100
水分% moisture	≤5
强度% Strength	≥ 95
灰分% Ash	12
装填密度g/ml Bulk Density	0.48 - 0.56
PH值 PH Value	6 9

# **Composite Oxide Refined Desulfurizer**



1. High desulfurization accuracy, 2. Fast reaction speed, 3. Wide desulfurization range, 4. Large working sulfur capacity under anaerobic conditions, 5. Good water resistance, 6. Wide applicable temperature range. 0-100°C. This fine desulfurizer is suitable for fine desulfurization under various anaerobic conditions such as LPG, naphtha, natural gas, water gas, coke oven gas, shift gas, food, CO2, etc. It can also be used in conjunction with normal temperature hydrolysis catalysts for propylene fine desulfurization.

规格 mm	
Specification	Ø 3-5*(3-15)
饱和硫容mg/g	
Saturated sulfur capacity	≥ 800-900
强度N/cm	
Strength	40 50
堆密度g/ml	
Density	0.70 0.80
工作硫容	
sulfur capacity	≥ 20



#### •Water purification.

(carbon retains pesticides, greases, oils, detergents, disinfection by-products, toxins, color-producing compounds, compounds originating from the decomposition of algae and plants or from animal metabolism...).

#### •Deodorization and air purification.

For example: in cartridge respirators, air recirculation systems in public spaces, drain vents and water treatment plants, paint application booths, spaces that store or apply organic solvents.

#### •Treatment of people with acute intoxication.

Activated charcoal is considered the "most universal antidote", and is applied in emergency rooms and hospitals.

#### ·Sugar refining.

The charcoal retains the proteins that give color to the cane juice; the fundamental objective of this process is to prevent the sugar from fermenting and spoiling.

#### Discoloration of vegetable oils.

Such as coconut, Corn glucose and other liquids intended for food.

#### •Discoloration and deodorization of alcoholic beverages.

Such as grape wines and distillates of any origin

#### •Gold recovery.

Gold that cannot be separated from minerals by flotation processes is dissolved in sodium cyanide and adsorbed on activated carbon.



**Gas & Petroleum Refine** 



**Water Treatment** 



**Fresh Water Processing** 



**Laboratory Work** 



Air Filter & Purification





















