

## Activated Carbon Catalog

Ensuring Smooth Operations with Premium Industrial Supplies.

Based in the Philippines, AP Air-Liquid
Industrial Equipment Trading is a
dedicated provider of a wide range of
industrial necessities. Our core
offerings include reliable air
compressors, advanced filtration
solutions for air, oil, and liquids, a
diverse selection of purification media,
and a complete inventory of industrial
tools, parts, and consumables.

We strive to be a dependable partner, delivering quality products that meet the diverse needs of industrial operations.



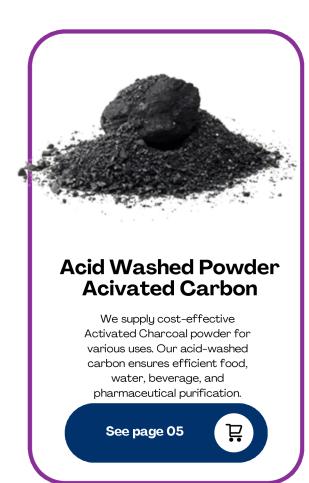


## **Unwashed Powder Activated Carbon**

Effectively removes unwanted color, odor, and impurities due to its high microporosity. As a trusted Indian manufacturer, we produce this deodorizer and purifier under strict quality control.

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## Granular Activated Carbon

With its larger particles, is ideal for gas and vapor absorption. It's used in water treatment, deodorization, and flow system separation.

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## Extruded Activated Carbon

Offers exceptional absorption capacity for air and gas streams. It effectively removes contaminants like VOCs, ammonia, and mercury, ideal for vapor phase applications.

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# **Purification & Filtration**





## **Impregnated Acivated Carbon**

Enhances contaminant removal by introducing specific chemicals. This process improves its performance for targeted air or water purification applications.

**Inquire for Specs** 









As a leading supplier of Activated Carbon, we provide an unparalleled solution for diverse purification challenges. Our expertise in manufacturing high-quality granular and powdered activated carbon ensures superior adsorption, exceptional efficiency, and robust, long-lasting performance.

## **Activated Carbon**

## **FEATURES:**

- · High Porosity and Surface Area
- · Adsorption Capacity excels at adsorption
- Various Pore Size Distribution
- Chemically inert and stable
- · Wide range of application
- Reactivatability
- Can be produced from various carbon-rich raw materials

Activated carbon, also known as activated charcoal, is a highly porous material with exceptional adsorption capabilities.

This versatile product is your go-to for critical applications in food and beverage purification, municipal and industrial water treatment, air and gas purification, pharmaceutical processing, and a wide array of chemical and environmental remediation uses.

## **UNWASHED ACTIVATED CARBON SPECIFICATION**

MATERIALS	Pinewood						
PROCESS	Steam Activation						
PROPERTIES	Unit	P100	P150	P200	P250	P280	P320
M B Value	mg/gm	100	150	200	250	280	320
KMn04	% min	25	30	35	45	55	65
Ash	% max	25	15	10	10	10	10
Acid Soluble (HCI)	% max	10	10	10	10	10	10
Water Soluble	% max	5	5	3	2	2	1
Moisture	% max	20	10	10	10	10	10
рН		Alkaline					
Particle Size		98% Passes thru 100 Mesh					





## Purification & Filtration

## Activated Carbon

## **ACID WASHED ACTIVATED CARBON SPECIFICATION**

MATERIALS	Pinewood							
PROCESS	Chemical and Steam Activation							
PROPERTIES	Unit	AW150	AW200	AW250	AW280	AW320		
M B Value	mg/gm	150	200	250	280	320		
KMn04	% min	25	35	45	55	65		
Ash	% max	10	5	5	5	3		
Acid Soluble (HCI)	% max	5	3	2	2	1		
Iron (ppm)	max	500	400	300	300	200		
Water Soluble	% max	5	1	1	1	1		
Moisture	% max	20	10	10	10	8		
рН		6.O - 7.5						
Particle Size		98% Passes thru 100 Mesh						

## **GRANULAR ACTIVATED CARBON SPECIFICATION**

MATERIALS	Coconut Shell								
PROCESS	Chemical and Steam Activation								
PROPERTIES	Unit	G500	G600	G600 G800		G1000			
Appearance		Black Granules							
lodine Adsorption	mg/g (min)	500	600	800	900	1000			
CTC Adsorption	% min	25	45	45	60	70			
Surface Areas	m2/g	600	700	800	1000	1000			
Moisture	% max	5	5	5	5	5			
Ash	% max	5	5	5	5	5			
рН		8 - 11	8 - 11	8 - 11	8 - 11	8 - 11			
Bulk Density	g/cc	0.50 +/- 0.1	0.50 +/- 0.1	0.50 +/- 0.1	0.50 +/- 0.1	0.50 +/- 0.1			
Hardness	% min	85	85	95	95	95			

## APPLICATIONS

Activated Carbon is an incredibly versatile material with a wide array of applications stemming from its exceptional adsorptive properties. Its most widespread use is in water purification, where it effectively removes a broad spectrum of impurities from drinking water, industrial wastewater, and even swimming pools. This includes the removal of chlorine, organic contaminants, pesticides, herbicides, pharmaceuticals, and compounds causing undesirable tastes, odors, and colors. In the food and beverage industry, activated carbon is crucial for decolorizing and purifying products like sugar syrups, edible oils, fruit juices, alcoholic beverages, and soft drinks, ensuring product purity and aesthetic appeal.

For air and gas purification, activated carbon is indispensable in removing volatile organic compounds (VOCs), odors, sulfur compounds, and other pollutants from industrial emissions, automotive exhaust, and indoor air quality systems, contributing to environmental protection and healthier environments. It also plays a significant role in chemical processing and pharmaceutical manufacturing for decolorization, purification, and catalyst support.

Furthermore, activated carbon is used in medical applications for treating poisonings and drug overdoses by adsorbing toxins in the gastrointestinal tract, and in personal protective equipment like respirators for filtering harmful gases and vapors. Its unique properties also make it valuable in gold recovery processes, solvent recovery, and cigarette filters to reduce harmful components.



## urification & Filtration





## **Extruded Activated Carbon**

## **FEATURES:**

- · Uniform Cylindrical Shape
- · High Mechanical Strength and Hardness
- Low Dust Content
- Optimized Pore Structure
- Good Adsorption Capacity and Fast Adsorption Rate
- Low Pressure Drop
- Versatility in Raw Materials
- Regenerability
- Optional Impregnation
- Chemical Stability

Extruded Activated Carbon (EAC) is a type of activated carbon formed into uniform cylindrical pellets. These pellets are created by combining activated carbon powder with a binder and then extruding the mixture.

Its unique manufacturing process gives it several key features that make it suitable for a variety of applications, especially in gas phase purification.

## Experience superior performance with our Pellet Activated Carbon. Produced using high-temperature steam activation, carefully selected binders, and strict quality control, this carbon boasts outstanding absorption capacity. It effectively purifies air and gas streams by removing a wide range of contaminants, aids in solvent recovery, and controls evaporative emissions. Ideal for vapor phase applications, it's your go-to solution for vapor remediation, VOC removal, soil venting, and the elimination of problematic organics like ammonia, sulfur compounds, mercury, and amines.

## EXTRUDED ACTIVATED CARBON SPECIFICATION

MATERIALS	Pinewood							
PROCESS	Steam Activation							
PROPERTIES	Unit	EAC500	EAC600	EAC700	EAC800	EAC900	EAC1000	
Diameter	mm	3, 4 & 5						
lodine Adsorption	mg/gm (min)	500	600	700	800	900	1000	
Ash Content	% max	8 - 10	8 - 10	8 - 10	8 - 10	8 - 10	8 - 10	
Moisture	% max	5	5	5	5	5	5	
Bulk Density	gm/cc	0.5 - 0.6	0.5 - 0.6	0.5 - 0.6	0.5 - 0.6	0.5 - 0.6	0.5 - 0.6	
Hardness	min	95	95	95	95	95	95	
CTC Adsorption	min	-	-	-	35 - 40	40 - 45	50 - 55	

## **APPLICATIONS**

Extruded Activated Carbon (EAC), prized for its strength, low dust, and tailored pores, sees broad use across industries. It purifies air and gas, tackling VOCs in industrial exhausts, controlling odors in sewage and commercial buildings, and capturing harmful gases from manufacturing, including paint and chemical plants. EAC is vital for biogas purification, removing H<sub>2</sub>S and siloxanes for cleaner biomethane. In flue gas treatment, it extracts mercury and acidic gases like SO<sub>2</sub>, ensuring cleaner power plant and waste incineration emissions.

Its strong adsorption makes it perfect for solvent recovery, efficiently capturing industrial solvents such as toluene and xylene, boosting sustainability. EAC also improves indoor air quality by adsorbing formaldehyde and odors in homes and businesses. Specialized uses include catalyst support and gas separation for nitrogen and oxygen generation. While primarily gas-focused, EAC also treats water, removing taste and odor, and is used in specific industrial wastewater applications. Additionally, it aids soil remediation and captures gasoline vapors in automotive systems.



