HOMEKA
Cleaner Environment, Better Life.

Homeka Activated carbon

More than just a product supplier



Activated carbon, recognized as a versatile macroporous adsorbent, is widely applied in numerous industries. At Homeka, we specialize in producing activated carbon using premium raw materials, including high-grade coal, coconut shells, and pine wood. Through advanced physical and chemical processing methods, such as washing, crushing, sieving, activation, and screening, we ensure products of the highest quality and consistency.

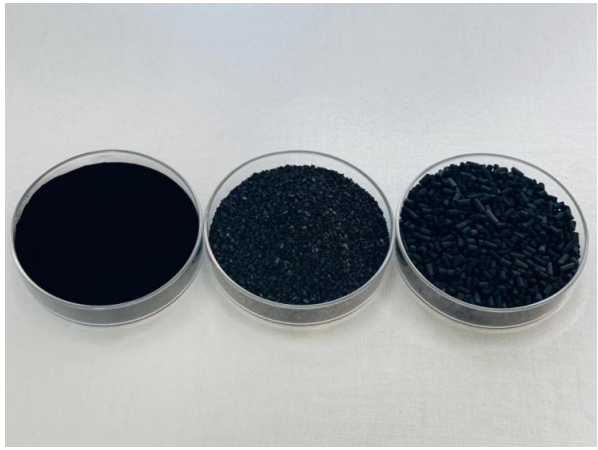
Homeka activated carbon features a well-developed pore structure, high specific surface area, exceptional adsorption capacity, low residual anion content, stable chemical properties, and ease of regeneration. It is available in granular, columnar, and powdered forms to cater to diverse customer requirements.

These products are recognized for their cost-effectiveness and versatility, proving highly efficient in applications such as **Water, Air & Gas Treatment, as well as in the Chemical, Food &Beverages, Water Purification and Automotive industries.**

1.1 Water treatment

Homeka activated carbon is widely used for the removal of organic contaminants, heavy metals, colors, odors, colloids, and pigments from various water sources, including industrial wastewater and municipal water systems. In addition, we also offer compatible filtration systems, as well as comprehensive maintenance and servicing solutions to ensure optimal performance.

- Removal of organic contaminants: benzene,toluene, ethylbenzene,xylene,phenols,absorbable organic halides,pesticides etc.
- Heavy Metal Adsorption: specific heavy metal ions such as lead (Pb), mercury (Hg), and cadmium (Cd).
- Available in granular, powder and columnar forms.



More detail:

technical index / Specification	Iodine value（mg /g）	Methylene blue（mg /g）	Ash content（%）	Intensity（%）	Density（g/L）	pH	Water content（%）
Homeka1-1.5mmC	900	-	8	95	570±20	9-11	≤3 or ≤5
	950	-	12	95	540±20	9-11	
Homeka1-3.0mmC Homeka1-4.0mmC	900	-	8	95	570±20	9-11	
	950	-	12	95	540±20	9-11	
	1000	160	12	94	490±20	9-11	
	1050	180	12	93	475±25	9-11	
	1070	200	15	90	410±30	9-11	
Homeka1-4*8(mesh)G	≥1050	175-230	8-15	≥92	350-550	9-11	2-5
Homeka1-8*16(mesh)G	≥1000	175-230	8-15	≥92	350-550	9-11	2-5
Homeka1-8*30(mesh)G	≥950	175-230	8-15	≥92	350-550	9-11	2-5
Homeka1-10*30(mesh)G Homeka1-12*40(mesh)G Homeka1-20*50(mesh)G	≥900	175-230	8-15	≥92	350-550	9-11	2-5
Homeka1-200(mesh)P	1000	160	12	90	460±40	9-11	≤3 or ≤5
Homeka1-325(mesh)P	1000	160	12	90	530±40	9-11	≤3 or ≤5

1.2 Air & Gas Treatment

Homeka activated carbon is extensively applied in air purification, utilizing its highly developed pore structure and exceptional adsorption capacity to effectively remove pollutants and improve air quality.

- Gas desulfurization and denitrification:Effectively removes sulfur dioxide (SO_2), nitrogen oxides (NOx), and volatile organic compounds (VOCs) such as formaldehyde and benzene in industrial factories.
- **Respiratory Protection:** Adsorbs harmful gases in respirators and gas masks.
- Available in granular and columnar forms.

More detail:

technical index / Specification	Iodine value（mg /g）	Carbon tetrachloride value（%）	Intensity（%）	Ash content1（%）	Ash content2（%）	Moisture（%）
Homeka2-1.5mmC Homeka2-2mmC Homeka2-3mmC Homeka2-4mmC Homeka2-5mmC Homeka2-7mmC	-	35	95	8	5	5
	800	40	95	8	5	5
	900	50	95	8	5	5
	950	55	95	8	5	5
	1000	60	95	12	5	5
	1050	70	93	12	5	5
	1080	80	93	12	8	5
	1100	90	90	15	10	5
	1100	100	90	17	10	5

For desulfurization and deamination：

technical index / Specification	compressive strength（daN）	kindling point（℃）	Desulfurization（mg/g）	deamination（%）	Density（g/L）	Moisture（%）	Iodine value（mg /g）	Ash content（%）
Homeka2C	≥40	≥420	20	38	570-700	≤4	≥380	12
	≥37	≥420	18	40	570-700	≤4	≥380	16
	≥30	≥420	15	35	570-700	≤4	≥380	18
	≥30	≥420	15	35	570-700	≤4	≥380	20

1.3 Chemical industry

Homeka provides a variety of different types of activated carbon, which can be tailored to meet specific customer requirements.

- Reaction medium: Functions as a medium for specific chemical reactions by either participating directly in the reaction or providing an active surface to facilitate the process.
- Purification and separation: Effectively removes organic solvent,impurities and colors, improving the purity and quality of products.
- Available in granular, powder and columnar forms.

More detail:

Specification \ technical index	Iodine value（mg /g）	Carbon tetrachloride value（%）	Intensity（%）	Density（g/L）	Ash content（%）	pH	Moisture（%）	Remarks
Homeka3-40Ag(silver carrier)	1000	60	95	490±20	12	9-11	≤3	as carrier
	1050	70	92	480±20	12	9-11	≤3	
Homeka3-40Cu(copper carrier)	1000	60	95	490±20	12	9-11	≤3	
	1050	70	92	480±20	12	9-11	≤3	
Homeka3-40K(potassium carrier)	1000	60	95	490±20	12	9-11	≤3	
	1050	70	92	480±20	12	9-11	≤3	
Specification \ technical index	Iodine value（mg /g）	Carbon tetrachloride value（%）	Intensity（%）	Density（g/L）	Ash content（%）	pH	Moisture（%）	Remarks
Homeka4-4mmC	1000	60	95	490±20	32	350	≤3	Solvent recovery
	1050	70	92	475±20	38	350	≤3	
	1070	90	90	410±20	48	350	≤3	
	1090	100	88	380±20	54	350	≤3	
Homeka4-6*12(mesh)G	1050	70	90	430±30	38	350	≤3	
Homeka4-8*30(mesh)G	1050	70	90	425±30	38	350	≤3	

1.4 Food &Beverages

The versatility of Homeka activated carbon makes it an essential solution for maintaining the quality, safety, and shelf life of food products throughout various production and storage processes.

- Food Processing: Removes color and impurities from certain food products, such as sugar and edible oils, enhancing their quality and extending shelf life.
- Food Safety: Acts as a food additive in specific applications to help prevent food contamination by absorbing harmful toxins.
- Available in granular, powder, and columnar forms.

More detail:

technical index / Specification	Iodine value （mg /g）	Methylene blue （mg /g）	Ash content （%）	Density （g/L）	pH	Water content （%）
Homeka5-8*30(mesh)G	800		8	560±40	9-11	≤3 or ≤5
	900		8	530±40	9-11	
	1000	160	8	460±40	9-11	
Homeka5-12*40(mesh)G	1000	160	8	460±40	9-11	
Homeka5-10*40(mesh)G	1050	180	12	445±40	9-11	
Homeka5-20*50(mesh)G	1050	180	8	445±40	9-11	
	1070	200	10	380±40	9-11	
	1070	200	15	380±40	9-11	
Homeka5-200(mesh)P	1000	160	12		9-11	
Homeka5-200(mesh)P	1030	180	15		9-11	

1.5 Water Purification

The application of activated carbon in water purification is essential for improving water quality, safeguarding public health, and addressing the growing demand for clean water in both industrial and consumer sectors.

- Removal of Chlorine and Chloramines: In municipal water treatment, activated carbon is used to remove residual chlorine and chloramines, which are crucial for disinfection, excessive levels can pose health risks.
- Odor and Color Removal: Activated carbon adsorbs compounds responsible for unpleasant odors and colors in water, improving its taste and appearance.
- Available in granular and columnar forms.

More detail:

technical index / Specification	Iodine value (mg /g)	Methylene blue (mg /g)	Ash content (%)	Intensity (%)	Density (g/L)	Water content (%)
Homeka6-4*8(mesh)G	≥1050	≥220	9-15	≥92	450	≤4
	≥1000	≥210	9-15	≥92	425	≤4
	≥950	≥200	9-15	≥92	450	≤4
	≥900	≥175	9-15	≥92	450	≤4
Homeka6-8*16(mesh)G	≥1050	≥220	9-15	≥92	450	≤4
	≥1000	≥210	9-15	≥92	425	≤4
	≥950	≥200	9-15	≥92	450	≤4
	≥900	≥175	9-15	≥92	450	≤4
Homeka6-8*20(mesh)G	≥1050	≥220	9-15	≥92	450	≤4
	≥1000	≥210	9-15	≥92	425	≤4
	≥950	≥200	9-15	≥92	450	≤4
	≥900	≥175	9-15	≥92	450	≤4
Homeka6-8*30(mesh)G	≥1050	≥220	9-15	≥92	450	≤4
	≥1000	≥210	9-15	≥92	425	≤4
	≥950	≥200	9-15	≥92	450	≤4
	≥900	≥175	9-15	≥92	450	≤4
Homeka6-12*40(mesh)G	≥1050	≥220	9-15	≥92	450	≤4
	≥1000	≥210	9-15	≥92	425	≤4
	≥950	≥200	9-15	≥92	450	≤4
	≥900	≥175	9-15	≥92	450	≤4

1.6 Automotive industry

The application of activated carbon in the automotive industry primarily focuses on exhaust gas treatment and interior air purification.

- Exhaust Gas Purification-Three-Way Catalytic Converters (TWC)：Activated carbon is utilized as a catalyst support in TWC systems to reduce harmful emissions, such as carbon monoxide (CO), nitrogen oxides (NOx), and hydrocarbons (HC), enhancing catalytic efficiency and lowering pollution.
- Interior Air Purification:Activated carbon filters integrated into vehicle air conditioning systems effectively absorb odors, harmful gases, and volatile organic compounds (VOCs).
- Available in powder and columnar forms.

More detail:

technical index / Specification	Iodine value（mg /g）	Carbon tetrachloride value（%）	Intensity（%）	Ash content1（%）	Ash content2（%）	Moisture（%）
Homeka2-1.5mmC Homeka2-2mmC Homeka2-3mmC Homeka2-4mmC Homeka2-5mmC Homeka2-7mmC	-	35	95	8	5	5
	800	40	95	8	5	5
	900	50	95	8	5	5
	950	55	95	8	5	5
	1000	60	95	12	5	5
	1050	70	93	12	5	5
	1080	80	93	12	8	5
	1100	90	90	15	10	5
	1100	100	90	17	10	5
Homeka6-4*10(mesh)G Homeka6-8*16(mesh)G Homeka6-8*30(mesh)G Homeka6-10*24(mesh)G	900	50	93	8	5	5
	950	55	93	8	5	5
	1000	60	93	8	6	5
	1030	60	93	12	6	5
	1050	70	90	12	6	5
	1080	80	90	12	8	5
	1100	90	90	12	8	5