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Granular Activated Coconut Carbon – Nuclear

Our line of Nuclear Granular Activated Carbon (GACC-Nuclear-8x16) is made from coconut shells and activated through high temperature & high pressure steam to create the internal pore structures which offer maximum efficiency in the adsorption process. It is desirable to have the greatest possible surface area within the smallest possible volume and Granular Activated Carbon brings that to the table with over 1,210,000 meters of surface area per gram. It is impregnated with 2% Triethylene diamine (TEDA) and 2% Potassium tri-iodide (I₃K) and meets ASTM-4069 specifications for nuclear grade carbons.

APPLICATION: For vapor filtration. Enhanced carbon for radioactive iodine and organic iodides removal. Prevents radioiodine from escaping to the atmosphere and protects personnel from exposure.

IMPREGNATED CARBON PROPERTIES:

Total Surface Area, minimum (Bet Method)	950-1050 m ² /gm
Bulk Density (g/cm ³) (ASTM D2854)	.55
Hardness, minimum (ASTM D3802)	97
pH Aqueous Extract, minimum (ASTM D3838)	9.2
CCL ₄ Activity, minimum (ASTM D3467)	60%
Moisture Content, maximum (ASTM D2867)	5%
Ash Content, maximum (ASTM D2866)	3%
Ignition Temperature (ASTM D3466)	330°C
Particle Size (U.S. Mesh)	8x16

Radioiodine Removal Efficiency, ASTM D3803			
Molecular Iodine	30°C	95% RH	99.9% min.
Methyl Iodide	30°C	95% RH	97.0% min.
Methyl Iodide	80°C	95% RH	99.0% min.
Methyl Iodide	130°C	95% RH	98.0% min.
Molecular Iodine Retention	180°C		99.5% min.

Standard Packaging: 35 lb. boxes. 245 lb. drums. 1280lb. super sacks available.

Safety Notice: Wet Activated Carbon depletes Oxygen and creates a severe safety hazard for people working in confined spaces such as inside filters.

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