



TYPICAL PROPERTIES*

Nitrogen BET surface area	785 m ² /g
Iodine number	550 to 650 mg/g
Sulfur content	3.4 wt%, dry basis
Moisture content	0.76 wt%, as-received basis
Ignition temperature	410 °C
Mesh size (US Sieve Series)	95% less than 325 mesh (45 µm)
Bulk density (tamped)	0.62 g/cm ³ 39 lb/ft ³

**for general information only; not purchase specifications*

PACKAGING & TRANSPORTATION

40 lb paper bags, 50 bags per pallet
Woven polypropylene bags
Bulk Trailer

Activated carbon, not regulated, exempt from DOT, IATA, and IMDG regulations

CAS registry number: 7440-44-0

Domestic freight classification: NMFC 040560

Import/Export classification: 3802.10.0000 (HS Tariff Classification)

HANDLING

See Material Data Safety Sheet (MSDS)



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EcoPAC-S®

Sulfur-Enriched Powdered Activated Carbon

EcoPAC-S is a powdered, steam-activated carbon designed specifically for the removal of mercury from combustion/incineration flue gases via carbon injection. EcoPAC-S was developed by Advanced Fuel Research, Inc. (AFR) under research grants from the US National Science Foundation and Environmental Protection Agency. AFR's patented technology (US Patents No. 6,103,205 and 6,322,613) is exclusively licensed by EcoCarbon Innovations, Inc.

Pilot testing under conditions relevant to the intended application, i.e. flue gas from a coal-fired boiler and a short residence time, demonstrated that EcoPAC-S's mercury-sorption capacity is better than other leading mercury sorbents.

The EcoPAC-S carbon is derived from waste tires, which translates to a lower price and environmental benefits associated with the utilization of massive amounts of solid waste. The pore structure of EcoPAC-S is optimized to provide effective mercury sorption on the time scale characteristic of the carbon-injection application. EcoPAC-S has a high surface area (785 m²/g) and a relatively high proportion of mesopores and macropores, which make it easier for mercury to penetrate the carbon pore structure in a short residence time (typically less than a second). One of the reasons for EcoPAC-S's high mercury-sorption capacity is the high sulfur content of this activated carbon. The sulfur originates from the tire rubber rather than from additives and so higher sorbent-mercury kinetics are achieved at lower costs than other impregnated powder activated carbons. Additionally, zinc oxide also present in automobile tires, further enhances EcoPAC-S' mercury-sorption performance.

EcoPAC-S is a free-flowing powdered carbon with minimal caking tendencies, making it ideal for automatic dosing systems with dry or wet injection.

Note: Any specification provided is valid at the time of issuance of this publication. However, the company maintains a policy of continuous development and reserve the right to amend any specifications without notice.



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