

# FLUEPAC®-ST

## Powdered Activated Carbon



### Description

FLUEPAC®-ST is a powdered activated carbon produced from bituminous coal specially formulated to enhance mercury capture in flue gas treatment applications with elevated levels of sulfur trioxide (SO<sub>3</sub>).

### Specifications

Moisture, as packed by Weight	12% (max)
Sieve Size by volume (laser analysis)	
< 100 US Mesh	100% (min)
< 325 US Mesh	95% (min)

### Typical Properties

Iodine No.	400-600 mg/g
Apparent Density (tamped)	0.5-0.8 g/cc
Ignition Temperature	>400°C

### Applications

FLUEPAC®-ST has been proven to be particularly effective in applications where there are elevated SO<sub>3</sub> levels in the flue gas (such as coal-fired boilers burning high sulfur coals). In the presence of SO<sub>3</sub>, mercury is much more difficult to remove with standard activated carbons like FLUEPAC®-MC Plus. The performance improvement that can be expected by using FLUEPAC®-ST is illustrated in figures 1 and 2. The data used to generate these figures was taken from two different utilities in the eastern U.S. As shown, the FLUEPAC®-ST product greatly reduces the amount of carbon needed to achieve efficiencies above 70%.

FLUEPAC®-ST is injected directly into the flue gas stream and easily removed by existing particulate control devices. FLUEPAC®-ST can be landfilled with the ash as a non-hazardous material.

### Safety Message

Wet activated carbon preferentially removes oxygen from air. In closed or partially closed containers and vessels, oxygen depletion may reach hazardous levels. If workers are to enter a vessel containing carbon, appropriate sampling and work procedures for potentially low oxygen spaces should be followed, including all applicable Federal and State requirements.

### Features

Large number of high energy adsorption pores	High adsorption capacity for many pollutants. Effluent mercury levels can be reduced by over 95%.
Good transport pore structure	Rapid adsorption kinetics lead to low required contact times.
Completely devolatilized bituminous coal-based material	Product has a high ignition temperature which permits use over a wide temperature range. Safe bulk storage.

Figure 1: Performance Improvements Associated with Calgon Carbon's Sulfur Tolerant Product (FLUEPAC®-ST)

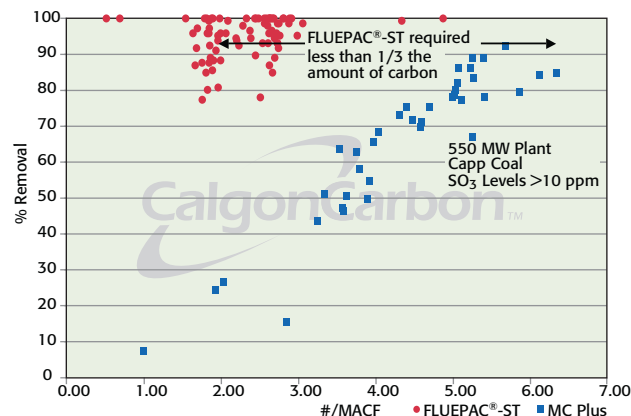
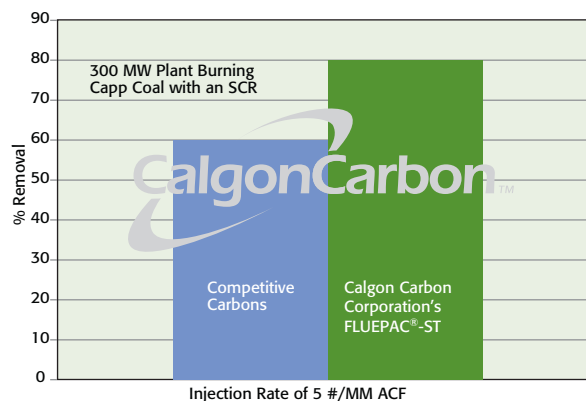


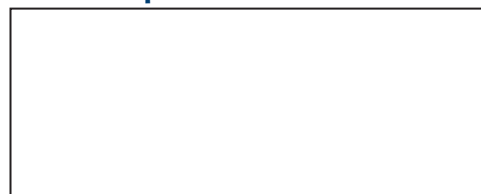
Figure 2: Calgon Carbon's Sulfur Tolerant Product Performance at High SO<sub>3</sub> levels (>20 ppm)



FLUEPAC® Patents pending.

### Benefits

### Your local representative



Making Water and Air Safer and Cleaner

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