

ADSORPTION CHARACTERISTICS  
OF SODIUM HEXAFLUORIDE  
ON ACTIVATED CARBON

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**ABSTRACT:** Sulfur Hexafluoride ( $\text{SF}_6$ ) is the standard tracer gas used in assessing control room envelope unfiltered inleakage and determining air flows using tracer gas techniques. It is generally accepted that typical nuclear grade carbons have little or no adsorptive capacity for  $\text{SF}_6$ . However, there are few studies evaluating the adsorption characteristics of  $\text{SF}_6$  on activated carbon and the possible effects on tracer gas testing. This paper presents adsorption/desorption isotherms for  $\text{SF}_6$  on a typical radioiodine removal activated carbon. The impact on radioiodine removal is also examined.