CLAIM

1. A method for removing, after a SiC epitaxial growth furnace system including an epitaxial growth furnace for forming a SiC film and an exhaust pipe of the furnace is cleaned with chlorine trifluoride gas, a chlorine trifluoride cleaning residue in the exhaust pipe, the exhaust pipe being made of stainless steel and having the stainless steel exposed on a gas-contacting surface thereof, the method comprising the steps of:

forming a SiC film by introducing hydrogen chloride gas together with a raw material gas into the epitaxial growth furnace in a SiC film formation process after completion of the cleaning with the chlorine trifluoride gas; and

removing the chlorine trifluoride cleaning residue in the exhaust pipe by discharging a processed gas used in the SiC film formation through the exhaust pipe.