CLAIMS

1. An adhesion removal method comprising:

reacting a sulfur-containing adhesion with a cleaning gas containing a fluorine~~-containing compound~~ gas, the sulfur-containing adhesion adhering onto at least one of an inner surface of a chamber and an inner surface of a pipe connected to the chamber, thereby removing the sulfur-containing adhesion.

2. The adhesion removal method according to claim 1, wherein the cleaning gas is brought into contact with the adhesion in a condition of a temperature of 20°C or more and 800°C or less and a pressure of 20 Pa or more and 101 kPa or less.

~~3. The adhesion removal method according to claim 1 or claim 2, wherein the fluorine-containing compound gas is at least one selected from the group consisting of fluorine gas, nitrogen trifluoride gas, and a fluorinated hydrocarbon gas, and the fluorinated hydrocarbon gas is at least one gas of compounds represented by Formulae (1), (2), (3), and (4):~~

~~$CH_{4-m}F_m$ (1)~~

~~$C_2H_{6-n}F_n$ (2)~~

~~$C_3H_{8-q}F_q$ (3)~~

~~$C_4H_{10-r}F_r$ (4)~~

~~where m in Formula (1) is an integer of 1 or more~~

~~and 4 or less; n in Formula (2) is an integer of 1 or more and 6 or less; q in Formula (3) is an integer of 1 or more and 8 or less; and r in Formula (4) is an integer of 1 or more and 10 or less.~~

~~4. The adhesion removal method according to claim 1 or claim 2, wherein the fluorine-containing compound gas is fluorine gas.~~

~~5. A film-forming method comprising:~~

~~a passivation step of supplying a passivation gas containing a sulfur-containing compound gas to a chamber in which a substrate is stored and reacting the substrate with the passivation gas to form a passivation film on a surface of the substrate; and~~

~~an adhesion removal step of removing a sulfur-containing adhesion adhering onto at least one of an inner surface of the chamber and an inner surface of a pipe connected to the chamber after the passivation step,~~

~~wherein~~

~~the adhesion removal step is performed by the adhesion removal method according to any one of claims 1 to 4.~~

~~6. The film-forming method according to claim 5, wherein the sulfur-containing compound gas is hydrogen sulfide gas.~~