Claims

Claim 1

A residue disposal method of disposing of a residue which contains aluminum chloride and which is discharged in a reaction product gas processing step included in a trichlorosilane producing method of producing trichlorosilane by reacting metal silicon, tetrachlorosilane, and hydrogen with each other, the residue disposal method comprising:

a drying step of (i) drying the residue so that the residue contains a chlorosilane compound in an amount of not more than 10% by mass and (ii) obtaining a powdered residue,

a temperature in the drying step being 50°C to 130°C.

Claim 2

The residue disposal method as set forth in claim 1, further comprising, before the drying step, a residue concentrating step of concentrating the residue so that a concentration of a solid substance contained in the residue is 20% by mass to 30% by mass in a state where the solid substance contains crystals of the aluminum chloride.

Claim 3

The residue disposal method as set forth in claim 1 or 2, wherein the powdered residue obtained in the drying step is transferred via an inert carrier gas, having a dew-point temperature of not higher than -70°C, and is disposed of.

Claim 4

The residue disposal method as set forth in any one of claims 1, 2, and 3, wherein the drying step is carried out with use of a vertical dryer.

Claim 5

A trichlorosilane producing method comprising, as a step, a residue disposal method recited in any one of claims 1, 2, 3, and 4.