CLAIMS

1. A precursor solution for thin-film deposition, comprising a functional solvent selected from among a liquid alkene and a liquid alkyne capable of dissolving a metal halide at room temperature and a metal halide dissolved in the functional solvent and existing as a liquid at room temperature, wherein the metal halide and the functional solvent are mixed at a molar ratio of 1:0.01 to 1:4 and wherein the metal halide includes Ti, Al, Si, W, Hf, Zn, Ni, wherein

the alkene is a hydrocarbon containing a carbon-carbon double bond and at least one selected from among a linear alkene, a cyclic alkene and a branched alkene, and

the alkyne is a hydrocarbon containing a carbon-carbon triple bond and at least one selected from among a linear alkyne and a branched alkyne.

2. The precursor solution of claim 1, wherein the metal halide is metal fluoride or metal chloride.

3. A method of forming a thin film using the precursor solution of claim 1, comprising:

supplying a precursor solution for thin-film deposition

in a manner in which a mixture of a metal halide and a functional solvent is supplied into a chamber.

4. A method of forming a thin film using the precursor solution of claim 1, comprising:

supplying a precursor solution for thin-film deposition in a manner in which a metal halide and a functional solvent are individually supplied into a chamber at the same time.

5. A method of forming a thin film using the precursor solution of claim 1, comprising:

supplying a precursor solution for thin-film deposition in a manner in which a metal halide is supplied into a chamber and then a functional solvent is supplied into the chamber.

6. The method of any one of claims 5 to 6, further comprising, after supplying the precursor solution for thin-film deposition:

purging the chamber; and

additionally supplying a functional solvent into the purged chamber.