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.

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

3. The precursor solution of claim 1, 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.

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

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 and a functional solvent are individually supplied into a chamber at the same time.

6. 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.

7. 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.