ABSTRACT

A method for forming porous insulating film using cyclic siloxane raw material monomer is provided, which method suppresses detachment of hydrocarbon and is able to form a low-density film.

In a method where at least cyclic organosiloxane raw material 101 is supplied to a reaction chamber and an insulating film is formed by plasma vapor deposition method, above-mentioned problem is solved by a method for a forming porous insulating film using the mixed gas of a cyclic organosiloxane raw material 101 and a compound raw material 103 including a part of chemical structure comprising the cyclic organosiloxane raw material 101. The compound raw material 103 is preferably a compound including a part of side chain of the cyclic organosiloxane raw material 101.