ABSTRACT

An object of the present invention is to provide a composition enabling to form a topcoat layer capable of preventing outgassing and of keeping deep UV light from impairing pattern shape in a lithographic process with extreme UV light. The object can be achieved by a composition of the invention for forming a topcoat layer. The composition contains a water-soluble polymer comprising hydrophilic groups and deep-UV absorbing groups absorbing light of 170 to 300 nm, and an aqueous solvent. The solvent comprises 70 weight% or more of water. The composition is cast on a resist layer and heated to harden, and thereafter the resist layer is subjected to exposure by use of extreme UV light and then developed to form a pattern.