The linear or branched saturated hydrocarbon group preferably contains 1 to 25 carbon atoms, more preferably 1 to 15 carbon atoms, and still more preferably 4 to 10 carbon atoms.

Examples of the linear saturated hydrocarbon group include a methyl group, ethyl group, propyl group, butyl group, pentyl group, hexyl group, heptyl group, octyl group, nonyl group and decyl group.

Examples of the branched saturated hydrocarbon group include the tertiary alkyl groups mentioned above within the description of R^{56}. Further, other examples of the branched saturated hydrocarbon group, excluding tertiary alkyl groups, include a 1-methylethyl group, 1-methylpropyl group, 2-methylpropyl group, 1-methylbutyl group, 2-methylbutyl group, 3-methylbutyl group, 1-ethylbutyl group, 2-ethylbutyl group, 1-methylpentyl group, 2-methylpentyl group, 3-methylpentyl group and 4-methylpentyl group.

The linear or branched saturated hydrocarbon group may have a substituent. Examples of the substituent include an alkoxy group, halogen atom, halogenated alkyl group, hydroxyl group, oxo group (=O), cyano group and carboxyl group.

The alkoxy group as the substituent for the linear or branched saturated hydrocarbon group is preferably an alkoxy group having 1 to 5 carbon atoms, more preferably a methoxy group, ethoxy group, n-propoxy group, iso-propoxy group, n-butoxy group or tert-butoxy group, and most preferably a methoxy group or an ethoxy group.

Examples of the halogen atom as the substituent for the linear or branched saturated hydrocarbon group include a fluorine atom, chlorine atom, bromine atom and iodine atom, and a fluorine atom is preferable.

Examples of the halogenated alkyl group as the substituent for the linear or branched saturated hydrocarbon group include groups in which part or all of the hydrogen atoms within an aforementioned linear or branched saturated hydrocarbon group have each been substituted with an aforementioned halogen atom.

The cyclic saturated hydrocarbon group for $R^{7"}$, $R^{8"}$ and $R^{9"}$ preferably contains 3 to 20 carbon atoms. The cyclic saturated hydrocarbon group may be either a polycyclic group or a monocyclic group. Examples include groups in which one hydrogen atom has been removed from a monocycloalkane, and groups in which one hydrogen atom has been removed from a polycycloalkane such as a bicycloalkane, tricycloalkane or tetracycloalkane. More specific examples include groups in which one hydrogen atom has been removed from a monocycloalkane such as cyclopentane, cyclohexane, cycloheptane or cyclooctane, and groups in which one hydrogen atom has been removed from a polycycloalkane such as adamantane, norbornane, isobornane, tricyclodecane or tetracyclododecane.

The cyclic saturated hydrocarbon group may have a substituent. For example, a portion of the carbon atoms that constitute a ring within the cyclic saturated hydrocarbon group may be substituted with a hetero atom, or a hydrogen atom bonded to a ring within the cyclic saturated hydrocarbon group may be substituted with a substituent.

Examples of the former case include groups in which one or more hydrogen atoms have been removed from a heterocycloalkane in which a portion of the carbon atoms that constitute the ring(s) of an aforementioned monocycloalkane or polycycloalkane have been substituted with a hetero atom such as an oxygen atom, sulfur atom or nitrogen atom. Further, the ring structure may include an ester linkage (—C(=O)—O—). Specific examples include lactone-containing monocyclic groups such as groups in which one hydrogen atom has been removed from γ-butyrolactone, and lactone-containing polycyclic groups in which one hydrogen atom has been removed from a lactone ring-containing bicycloalkane, tricycloalkane or tetracycloalkane.

In the latter case, examples of the substituent include the same substituents as those described above for the linear or branched saturated hydrocarbon group, and an alkyl group of 1 to 5 carbon atoms.

Further, the saturated hydrocarbon group for $R^{7"}$, $R^{8"}$ and $R^{9"}$ may be a combination of a linear or branched saturated hydrocarbon group and a cyclic saturated hydrocarbon group.

Examples of combinations of a linear or branched saturated hydrocarbon group and a cyclic saturated hydrocarbon group include groups in which a cyclic saturated hydrocarbon group is bonded as a substituent to a linear or branched saturated hydrocarbon group (such as a 1-(1-adamantyl)methyl group), and groups in which a linear or branched saturated hydrocarbon group is bonded as a substituent to a cyclic saturated hydrocarbon group.

The aliphatic unsaturated hydrocarbon group for $R^{7"}$, $R^{8"}$ and $R^{9"}$ is preferably a linear or branched group. Examples of the linear aliphatic unsaturated hydrocarbon group include a vinyl group, propenyl group (allyl group), and butynyl group. Examples of the branched aliphatic unsaturated hydrocarbon group include a 1-methylpropenyl group and 2-methylpropenyl group. The linear or branched aliphatic unsaturated hydrocarbon group may have a substituent. Examples of the substituent include the same substituents as those described above for the linear or branched saturated hydrocarbon group.

Of the various possibilities described above, each of $R^{7"}$, $R^{8"}$ and $R^{9"}$ is preferably a hydrogen atom, a linear or branched saturated hydrocarbon group of 1 to 15 carbon atoms, or a cyclic saturated hydrocarbon group of 3 to 20 carbon atoms, as such groups yield superior lithography properties and resist pattern shape.

Among the various possibilities described above, the non-aromatic substituent that substitutes a hydrogen atom of the aforementioned alkyl group is preferably at least one substituent selected from among an alkyl group, halogen atom, oxo group (=O), alkoxyalkyloxy group, alkoxycarbonylalkyloxy group, —C(=O)—O—$R^{7"}$, —O—C(=O)—$R^{8"}$ and —O—$R^{9"}$.

Of the above non-aromatic substituents, examples of the substituent that substitutes a portion of the carbon atoms that constitute the alkyl group include non-aromatic divalent substituents containing a hetero atom. There are no particular limitations on the hetero atom in such substituents, provided it is an atom other than a carbon atom or a hydrogen atom. Examples of the hetero atom include a halogen atom, oxygen atom, sulfur atom and nitrogen atom. Examples of the halogen atom include a fluorine atom, chlorine atom, iodine atom and bromine atom. The substituent may consist solely of the hetero atom, or may be a group that contains the hetero atom and a group or atom other than the hetero atom.

Specific examples of the "non-aromatic divalent substituent containing a hetero atom" that substitutes a portion of the carbon atoms include —O—, —C(=O)—O—, —C(=O)—, —O—C(=O)—O—, —C(=O)—NH—, —NH— (wherein H may be substituted with a substituent such as an alkyl group or an acyl group), —S—, —S(=O)$_2$— and —S(=O)$_2$—O—.

Among the aforementioned non-aromatic divalent substituents containing a hetero atom, a substituent that substitutes a portion of the carbon atoms that constitute the ring structure of a cyclic alkyl group is preferably —O—, —C(=O)—O—, —S—, —S(=O)$_2$— or —S(=O)$_2$—O—. Specific examples of cyclic alkyl groups having such a sub-