CLAIMS

1. An encapsulant composition for an optical device, the encapsulant composition comprising:

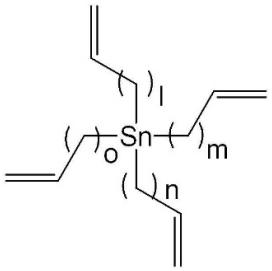
(1) 80 to 99 parts by weight of an olefin-based copolymer;

(2) 0.1 to 9 parts by weight of a crosslinking agent;

(3) 0.01 to 2 parts by weight of a silane coupling agent; and

(4) 0.1 to 9 parts by weight of a compound represented by the following Formula 1:

[Formula 1]



in Formula 1, l, m, n, and o are each independently an integer of 0 to 4.

2. The encapsulant composition for an optical device according to claim 1, wherein the (1) olefin-based copolymer satisfies the following conditions:

(a) a density of 0.85 to 0.90 g/cc, and

(b) a melt index of 0.1 to 100 g/10 min.

3. The encapsulant composition for an optical device according to claim 1, wherein the (1) olefin-based copolymer is an ethylene alpha-olefin copolymer.

4. The encapsulant composition for an optical device according to claim 1, wherein the (1) olefin-based copolymer has a volume resistance of 1.0×10^{15} Ω·cm or more.

5. The encapsulant composition for an optical device according to claim 1, wherein the crosslinking agent is one or two or more selected from the group consisting of an organic peroxide, a hydroperoxide and an azo compound.

6. The encapsulant composition for an optical device according to claim 1, wherein the crosslinking agent is one or more selected from the group consisting of t-butylcumylperoxide, di-t-butyl peroxide, di-cumyl peroxide, 2,5-dimethyl-2,5-di(t-

butylperoxy)hexane, 2,5-dimethyl-2,5-di(t-butylperoxy)-3-hexyne, cumene hydroperoxide, diisopropyl benzene hydroperoxide, 2,5-dimethyl-2,5-di(hydroperoxy)hexane, t-butyl hydroperoxide, bis-3,5,5-trimethylhexanoyl peroxide, octanoyl peroxide, benzoyl peroxide, o-methylbenzoyl peroxide, 2,4-dichlorobenzoyl peroxide, t-butylperoxy isobutyrate, t-butylperoxy acetate, t-butylperoxy-2-ethylhexylcarbonate (TBEC), t-butylperoxy-2-ethylhexanoate, t-butylperoxy pyvalate, t-butylperoxy octoate, t-butylperoxyisopropyl carbonate, t-butylperoxybenzoate, di-t-butylperoxyphthalate, 2,5-dimethyl-2,5-di(benzoylperoxy)hexane, 2,5-dimethyl-2,5-di(benzoylperoxy)-3-hexyne, methyl ethyl ketone peroxide, cyclohexanone peroxide, azobisisobutyronitrile and azobis(2,4-dimethylvaleronitrile).

7. The encapsulant composition for an optical device according to claim 1, wherein the silane coupling agent is one or more selected from the group consisting of N-(β-aminoethyl)-γ-aminopropyltrimethoxysilane, N-(β-aminoethyl)-γ-aminopropylmethyldimethoxysilane, γ-aminopropyltriethoxysilane, γ-glycidoxypropyltrimethoxysilane, γ-methacryloxypropyltrimethoxysilane (MEMO), vinyltrimethoxysilane, vinyltriethoxysilane, 3-methacryloxypropyl methyldimethoxysilane, 3-methacryloxypropyl methyldiethoxysilane, 3-methacryloxypropyl triethoxysilane, and p-styryl trimethoxysilane.

8. The encapsulant composition for an optical device according to claim 1, wherein, in Formula 1, l, m, n, and o are each independently an integer of 0 to 2.

9. The encapsulant composition for an optical device according to claim 1, wherein the compound of Formula 1 is tetravinyltin.

10. The encapsulant composition for an optical device according to claim 1, wherein the encapsulant composition for an optical device further comprises (5) a crosslinking auxiliary agent in addition to the compound of Formula 1, and

the (5) crosslinking auxiliary agent comprises one or more of an allyl group or a (meth)acryloxy group.

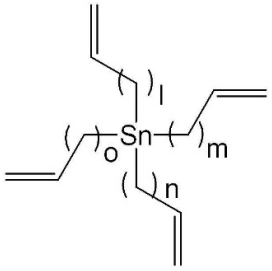
11. The encapsulant composition for an optical device

according to claim 10, wherein the (5) crosslinking auxiliary agent comprises one or more selected from the group consisting of triallyl isocyanurate (TAIC), triallyl cyanurate, diallyl phthalate, diallyl fumarate, diallyl maleate, ethylene glycol diacrylate, ethylene glycol dimethacrylate, and trimethylolpropane trimethacrylate.

12. The encapsulant composition for an optical device according to claim 10, wherein a weight ratio of the (4) compound of Formula 1 and the (5) crosslinking auxiliary agent is 20:80 to 80:20.

13. An encapsulant film for an optical device, the encapsulant film comprising an ethylene/alpha-olefin copolymer and a compound of the following Formula 1:

[Formula 1]



in Formula 1, l, m, n, and o are each independently an integer of 0 to 4.

14. An optical device module, comprising an optical device, and the encapsulant film for an optical device according to claim 13.