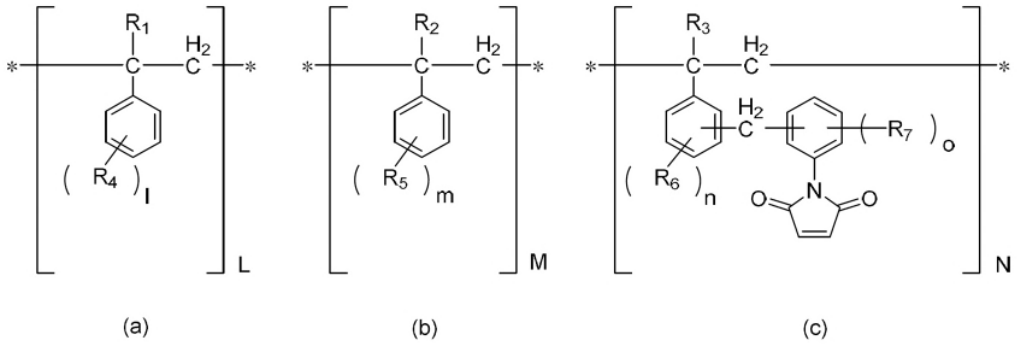
Claims

1. A maleimide resin having repeating units of the following formulae (a), (b), and (c):



(a) (b) (c)

in the above formulae,

R_1 is a methyl group, R_2 is a hydrogen atom, and R_3 is a methyl group or a hydrogen atom;

R_4 to R_7 represent a hydrogen atom, a hydrocarbon group having 1 to 10 carbon atoms, or a halogenated alkyl group;

"l" and "m" each represent an integer of 0 to 5;

"n" and "o" each represent an integer of 0 to 4;

L represents the number of repeating units (a), the average value of L being greater than 0 and not greater than 20;

M represents the number of repeating units (b), the average value of M being greater than 0 and not greater than 20;

N represents the number of repeating units (c), the average value of N being 1 to 20;

(a), (b), and (c) are joined by *, respectively; and

the repeating positions may be random.

2. A curable resin composition containing the maleimide resin according to claim 1.

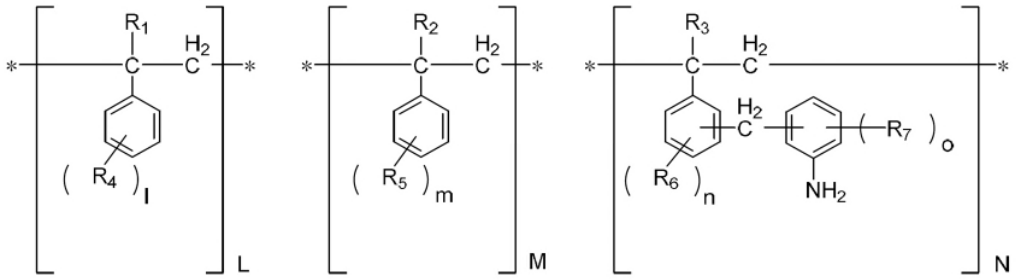
3. The curable resin composition according to claim 2, further comprising a curable resin other than the maleimide resin.

4. The curable resin composition according to claim 2, further comprising a curing accelerator.

5. A cured product obtained by curing the maleimide resin according to claim 1.

6. A cured product obtained by curing the curable resin composition according to claim 2.

7. An amine resin having repeating units of the following formula (a), (b), and (d):



(a) (b) (d)

in formulae (a), (b), and (d),

R_1 is a methyl group, R_2 is a hydrogen atom, and R_3 is a methyl group or a hydrogen atom;

R_4 to R_7 represent a hydrogen atom, a hydrocarbon group having 1 to 10 carbon atoms, or a halogenated alkyl group;

"l" and "m" each represent an integer of 0 to 5;

"n" and "o" each represent an integer of 0 to 4;

L represents the number of repeating units (a), the average value of L being greater than 0 and not greater than 20;

M represents the number of repeating units (b), the average value of M being greater than 0 and not greater than 20;

N represents the number of repeating units (d), the average value of N being 1 to 20;

(a), (b), and (d) are joined by *, respectively; and

the repeating positions may be random.