CLAIMS

1. An antifouling coating composition comprising a hydrolyzable resin (A), a first non-hydrolyzable resin (B), a second non-hydrolyzable resin (C), and an antifouling agent (D), wherein

a glass transition temperature Tg_B°C and a solubility parameter SP_B of the first non-hydrolyzable resin (B), and a glass transition temperature Tg_C°C and a solubility parameter SP_C of the second non-hydrolyzable resin (C) satisfy following expressions [1] to [4]:

$$Tg_B - Tg_C \geq 60 \quad [1]$$

$$10.5 \geq SP_B \geq 9.5 \quad [2]$$

$$10.6 \geq SP_C \geq 9.5 \quad [3]$$

$$|SP_B - SP_C| \leq 1.0 \quad [4],$$

and wherein

the Tg_B is in a range of greater than or equal to 40°C and less than or equal to 80°C.

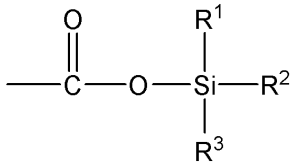
2. The antifouling coating composition according to claim 1, wherein the SP_B is in a range of greater than or equal to 9.6 and less than or equal to 10.3.

3. The antifouling coating composition according to claim 1, wherein the Tg_C is in a range of greater than or equal to -50°C and less than or equal to -20°C, and the SP_C is in a range of greater than or equal to 9.8 and less than or equal to 10.6.

4. The antifouling coating composition according to claim 1, wherein the hydrolyzable resin (A) has a glass transition temperature Tg_A in a range of greater than or equal to 10°C and less than or equal to 80°C, and a solubility parameter SP_A in a range of greater than or equal to 8.5 and less than or equal to 9.7.

5. The antifouling coating composition according to claim 1, wherein the hydrolyzable resin (A) has a silicon atom-containing group represented by a following formula (1):

[Chemical formula 1]



(1)

wherein the formula (1), R^1, R^2, and R^3 each independently represent a C1 to C6 hydrocarbon group.

6. The antifouling coating composition according to claim 1, further comprising a rosin compound (E).

7. The antifouling coating composition according to claim 1, wherein a content ratio of the first non-hydrolyzable resin (B) to the hydrolyzable resin (A) is greater than or equal to 0.1 and less than or equal to 0.45 in terms of mass ratio.

8. The antifouling coating composition according to claim 1, wherein a content ratio of the second non-hydrolyzable resin (C) to the hydrolyzable resin (A) is greater than or equal to 0.05 and less than or equal to 0.65 in terms of mass ratio.

9. The antifouling coating composition according to claim 1, wherein a content of the antifouling agent (D) is greater than or equal to 0.3 parts by mass and less than or equal to 550 parts by mass, based on 100 parts by mass of the hydrolyzable resin (A).

10. A coating film formed from the antifouling coating composition according to claim 1.

11. A ship comprising the coating film according to claim 10.

12. An underwater structure comprising the coating film according to claim 10.