CLAIMS

1. A method for washing clothing, comprising washing clothing with a detergent liquid having a pH of 3.5 or more and 8.5 or less at 20°C obtained by mixing the following component (A) and component (B), and water having a hardness:

component (A): an internal olefin sulfonate having 15 or more and 24 or less carbon atoms; and

component (B): protease.

2. The method for washing clothing according to claim 1, wherein the component (A) is an internal olefin sulfonate including an internal olefin sulfonate having 15 or more and 24 or less carbon atoms with the sulfonate group at position 2 or higher and position 4 or lower (IO-1S) and an olefin having 15 or more and 24 or less carbon atoms with the sulfonate group at position 5 or higher (IO-2S).

3. The method for washing clothing according to claim 2, wherein a mass ratio of (IO-1S)/(IO-2S) is 0.50 or more and 6.5 or less.

4. The method for washing clothing according to any one of claims 1 to 3, wherein the component (A) is one or more selected from the following component (a1) and component (a2), and a mass ratio (a2)/(a1) of the

component (a2) to the component (a1) is 0 or more and 1 or less:

component (a1): an internal olefin sulfonate having 15 or more and 16 or less carbon atoms; and

component (a2): an internal olefin sulfonate having 17 or more and 24 or less carbon atoms.

5. The method for washing clothing according to any one of claims 1 to 4, wherein a content of an internal olefin sulfonate with the sulfonate group at position 2 in the component (A) is 10% by mass or more and 60% by mass or less.

6. The method for washing clothing according to any one of claims 1 to 5, wherein a content of an internal olefin sulfonate with the sulfonate group at position 1 in the component (A) is 10% by mass or less and 0.01% by mass or more.

7. The method for washing clothing according to any one of claims 1 to 6, wherein the component (B) is a subtilisin protease derived from Bacillus sp.

8. The method for washing clothing according to any one of claims 1 to 7, wherein the hardness of water having a

hardness is, by German hardness, 1°dH or more and 20°dH or less.

9. The method for washing clothing according to any one of claims 1 to 8, wherein a content of the component (A) in the detergent liquid is 50 mg/kg or more and 4000 mg/kg or less.

10. The method for washing clothing according to any one of claims 1 to 9, wherein a content of the component (B) in the detergent liquid is, as an amount of an enzyme protein, 0.1 mg/kg or more and 100 mg/kg or less.

11. The method for washing clothing according to any one of claims 1 to 10, wherein the pH of the detergent liquid at 20°C is 4.0 or more and 8.0 or less.

12. The method for washing clothing according to any one of claims 1 to 11, wherein time to wash clothing is 1 minute or more and 12 hours or less.

13. The method for washing clothing according to any one of claims 1 to 12, wherein clothing is washed by being soaked in the detergent liquid.

14. The method for washing clothing according to claim 13, wherein clothing is soaked in the detergent liquid,

and thereafter the clothing is mixed with the detergent liquid and subjected to stirring-washing.

15. The method for washing clothing according to any one of claims 1 to 14, wherein clothing after being washed is rinsed with water.

16. The method for washing clothing according to any one of claims 1 to 15, wherein the detergent liquid contains, as a component (C), a surfactant other than the component (A).

17. The method for washing clothing according to any one of claims 1 to 16, wherein the component (C) is a nonionic surfactant having a hydroxy group or polyoxyalkylene group.

18. The method for washing clothing according to claim 17, wherein the component (C) is a nonionic surfactant containing a polyoxyethylene group and having an HLB of 8 or more and 20 or less.

19. The method for washing clothing according to claim 16 or 17, wherein the component (C) is a nonionic surfactant having an HLB of 8 or more and 20 or less and represented by the following general formula (C5-1):

$$R^1(CO)_mO\text{-}(A^1O)n\text{-}R^2 \quad (C5\text{-}1)$$

wherein R^1 is an aliphatic hydrocarbon group having 9 or more and 16 or less carbon atoms, R^2 is a hydrogen atom or a methyl group, CO is a carbonyl group, m is 0 or 1, A^1O group is one or more groups selected from an ethyleneoxy group and a propyleneoxy group, and n is an average number of added moles and is 6 or more and 50 or less.

20. A method for enhancing a detergent activity of the following component (B), wherein, at the time of washing clothing with a detergent liquid having a pH of 3.5 or more and 8.5 or less at 20°C obtained by mixing the component (B) and water having a hardness, the following component (A) is present in the detergent liquid:

component (A): an internal olefin sulfonate having 15 or more and 24 or less carbon atoms; and

component (B): protease.