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Summary

Technical Problem

[0006] An object of the present disclosure is to provide a soft contact lens solution that imparts surface hydrophilicity, lubricity, and a lipid adhesion-suppressing ability to a soft contact lens.

Solution to Problem

[0007] The inventors have made extensive investigations in order to achieve the above-mentioned object. As a result, the inventors have found that a solution containing two specific kinds of copolymers and a buffering agent can achieve the above-mentioned object. Thus, the inventors have completed a soft contact lens solution of the present disclosure.

[0008] 1. In an aspect, there is provided a soft contact lens solution, including: 0.001 w/v% to 1.0 w/v% of a copolymer (P) containing constituent units represented by the following formulae (1a) to (1c), having a ratio "na:nb:nc" of numbers of the constituent units of 100:10 to 400:2 to 50, and having a weight-average molecular weight of

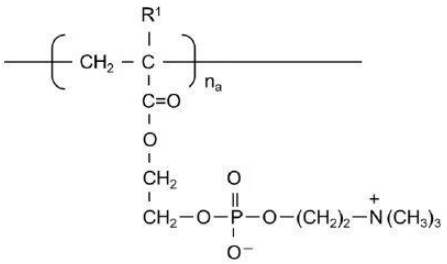
Claims

[Claim 1] A soft contact lens solution, comprising:

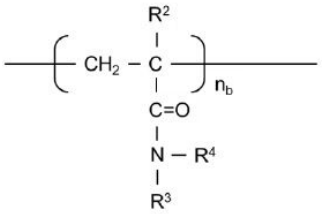
0.001 w/v% to 1.0 w/v% of a copolymer (P) containing constituent units represented by the following formulae (1a) to (1c), having a ratio "na:nb:nc" of numbers of the constituent units of 100:10 to 400:2 to 50, and having a weight-average molecular weight of from 5,000 to 2,000,000;

0.002 w/v% to 2.0 w/v% of a copolymer (Q) being a polyoxyethylene-polyoxypropylene block copolymer, having a number of moles added of ethylene oxide (EO) of from 120 to 200 and a number of moles added of propylene oxide (PO) of from 10 to 70, and having a content of the EO of from 60 wt% to 90 wt%; and

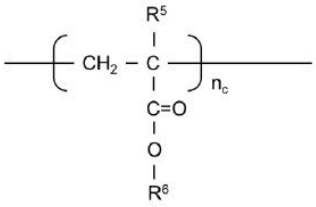
a buffering agent:



···Formula (1a)



···Formula (1b)



···Formula (1c)

where R^1, R^2, and R^5 each independently represent a hydrogen atom or a methyl group, R^3 and R^4 each independently represent a hydrogen atom, a methyl group, or an ethyl group, or are bonded to each other to represent a morpholino group, and R^6 represents a monovalent hydrocarbon group having 12 to 24 carbon atoms.

[Claim 2] The soft contact lens solution according to claim 1, wherein the buffering agent is a phosphate buffer.

[Claim 3] The soft contact lens solution according to claim 1, wherein the constituent unit represented by the formula (1a) is a constituent unit based on 2-(methacryloyloxy)ethyl 2-(trimethylammonio)ethyl phosphate, the constituent unit represented by the formula (1b) is a constituent unit based on N,N-dimethylacrylamide, and the constituent unit represented by the formula (1c) is a constituent unit based on stearyl methacrylate.

[Claim 4] The soft contact lens solution according to claim 1, wherein the constituent unit represented by the formula (1a) is

a constituent unit based on 2-(methacryloyloxy)ethyl 2-(trimethylammonio)ethyl phosphate, the constituent unit represented by the formula (1b) is a constituent unit based on N,N-dimethylacrylamide, and the constituent unit represented by the formula (1c) is a constituent unit based on lauryl methacrylate.

[Claim 5] The soft contact lens solution according to claim 3, wherein the number of moles added of ethylene oxide (EO) is about 160 and the number of moles added of propylene oxide (PO) is about 30.

[Claim 6] The soft contact lens solution according to claim 4, wherein the number of moles added of ethylene oxide (EO) is about 160 and the number of moles added of propylene oxide (PO) is about 30.