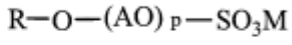
CLAIMS

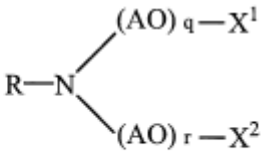
1. A dispersant composition for a hydraulic composition, comprising (A) a polymer compound having a naphthalene ring-containing monomer unit; and (B) one or two or more compounds selected from a compound represented by the following general formula (B1), a compound represented by the following general formula (B2) and a compound represented by the following general formula (B3),

wherein a molar ratio of a total amount of (B) to the naphthalene ring-containing monomer unit in (A) is 0.4% or more and 30% or less,

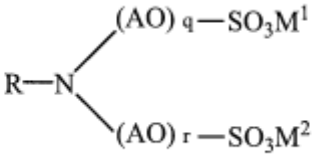
[Chemical Formula 1]



(B1)



(B2)



(B3)

wherein:

R is a hydrophobic group containing a carbon atom;

AO is an alkyleneoxy group having a carbon number of 2 or more and 4 or less;

p represents an average number of AO moles added and is 1 or more and 200 or less;

q and r are the same or different and each represents an average number of AO moles added and is 0 or more, and q+r is 1 or more and 200 or less;

M, M^1 and M^2 are the same or different and each represents a counter ion; and

X^1 and X^2 are the same or different, and each represents a hydrogen atom or a hydrocarbon group having a carbon number of 1 or more and 4 or less.

2. The dispersant composition for a hydraulic composition according to Claim 1, further comprising (C) an antifoaming agent.

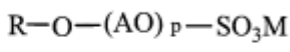
3. The dispersant composition for a hydraulic composition according to Claim 1 or 2, wherein the component (A) is a formaldehyde naphthalenesulfonate condensate or a salt thereof.

4. A hydraulic composition comprising a hydraulic powder, water, (A) a polymer compound having a naphthalene ring-containing monomer unit, and (B) one or two or more

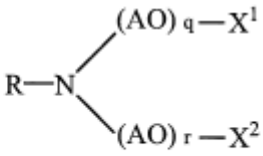
compounds selected from a compound represented by the following general formula (B1), a compound represented by the following general formula (B2) and a compound represented by the following general formula (B3),

wherein a molar ratio of a total amount of (B) to the naphthalene ring-containing monomer unit in (A) is 0.4% or more and 30% or less,

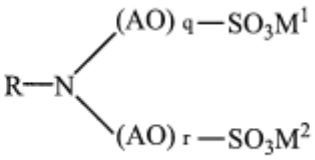
[Chemical Formula 2]



(B1)



(B2)



(B3)

wherein:

R is a hydrophobic group containing a carbon atom;

AO is an alkyleneoxy group having a carbon number of 2 or more and 4 or less;

p represents an average number of AO moles added and is 1 or more and 200 or less;

q and r are the same or different and each represents an

average number of AO moles added and is 0 or more, and q+r is 1 or more and 200 or less;

M, M^1 and M^2 are the same or different and each represents a counter ion; and

X^1 and X^2 are the same or different, and each represents a hydrogen atom or a hydrocarbon group having a carbon number of 1 or more and 4 or less.

5. The hydraulic composition according to Claim 4, further comprising (C) an antifoaming agent.

6. The hydraulic composition according to Claim 4 or 5, wherein (A) is a formaldehyde naphthalenesulfonate condensate or a salt thereof.

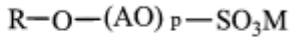
7. The hydraulic composition according to any one of Claims 4 to 6, wherein (A) is contained in an amount of 0.001 parts by mass or more and 10 parts by mass or less relative to 100 parts by mass of the hydraulic powder.

8. The hydraulic composition according to any one of Claims 4 to 7, wherein (B) is contained in an amount of 0.0001 parts by mass or more and 10 parts by mass or less relative to 100 parts by mass of the hydraulic powder.

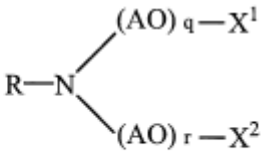
9. A method for manufacturing a dispersant composition for a hydraulic composition, wherein the dispersant composition comprises: (A) a polymer compound having a naphthalene ring-containing monomer unit; and (B) one or two or more compounds selected from a compound represented by the following general formula (B1), a compound represented by the following general formula (B2) and a compound represented by the following general formula (B3),

the method comprising mixing (A) and (B) so that a molar ratio of a total amount of (B) to the naphthalene ring-containing monomer unit in (A) is 0.4% or more and 30% or less,

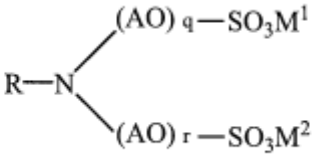
[Chemical Formula 3]



(B1)



(B2)



(B3)

wherein:

R is a hydrophobic group containing a carbon atom;

AO is an alkyleneoxy group having a carbon number of 2 or more and 4 or less;

p represents an average number of AO moles added and is 1 or more and 200 or less;

q and r are the same or different and each represents an average number of AO moles added and is 0 or more, and q+r is 1 or more and 200 or less;

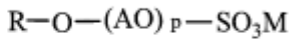
M, M^1 and M^2 are the same or different and each represents a counter ion; and

X^1 and X^2 are the same or different, and each represents a hydrogen atom or a hydrocarbon group having a carbon number of 1 or more and 4 or less.

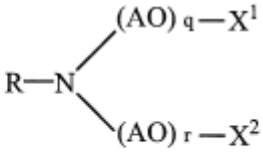
10. A method for manufacturing a hydraulic composition, wherein the hydraulic composition comprises a hydraulic powder, water, (A) a polymer compound having a naphthalene ring-containing monomer unit, and (B) one or two or more compounds selected from a compound represented by the following general formula (B1), a compound represented by the following general formula (B2) and a compound represented by the following general formula (B3),

the method comprising mixing (A) and (B) so that a molar ratio of a total amount of (B) to the naphthalene ring-containing monomer unit in (A) is 0.4% or more and 30% or less,

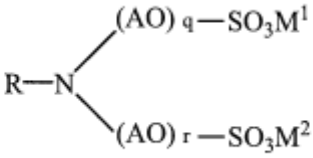
[Chemical Formula 4]



(B1)



(B2)



(B3)

wherein:

R is a hydrophobic group containing a carbon atom;

AO is an alkyleneoxy group having a carbon number of 2 or more and 4 or less;

p represents an average number of AO moles added and is 1 or more and 200 or less;

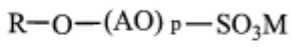
q and r are the same or different and each represents an average number of AO moles added and is 0 or more, and q+r is 1 or more and 200 or less;

M, M^1 and M^2 are the same or different and each represents a counter ion; and

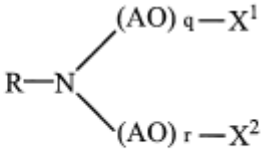
X^1 and X^2 are the same or different, and each represents a hydrogen atom or a hydrocarbon group having a carbon number of 1 or more and 4 or less.

11. In preparing a hydraulic composition by mixing a hydraulic powder, water, (A) a polymer compound having a naphthalene ring-containing monomer unit, and (B) one or two or more compounds selected from a compound represented by the following general formula (B1), a compound represented by the following general formula (B2) and a compound represented by the following general formula (B3), a method for improving dispersing performance of (A) for the hydraulic powder, the method comprising adding (B), the one or two or more compounds selected from a compound represented by the following general formula (B1), a compound represented by the following general formula (B2) and a compound represented by the following general formula (B3) so that a molar ratio of a total amount of (B) to the naphthalene ring-containing monomer unit in (A) is 0.4% or more and 30% or less,

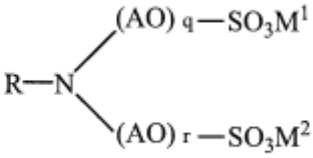
[Chemical Formula 5]



(B1)



(B2)



(B3)

wherein:

R is a hydrophobic group containing a carbon atom;

AO is an alkyleneoxy group having a carbon number of 2 or more and 4 or less;

p represents an average number of AO moles added and is 1 or more and 200 or less;

q and r are the same or different and each represents an average number of AO moles added and is 0 or more, and q+r is 1 or more and 200 or less;

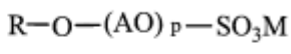
M, M^1 and M^2 are the same or different and each represents a counter ion; and

X^1 and X^2 are the same or different, and each represents a hydrogen atom or a hydrocarbon group having a carbon number of 1 or more and 4 or less.

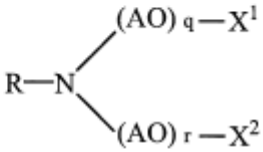
12. A dispersant composition for an inorganic powder, comprising: (A) a polymer compound having a naphthalene ring-containing monomer unit; and (B) one or two or more compounds selected from a compound represented by the following general formula (B1), a compound represented by the following general formula (B2) and a compound represented by the following general formula (B3),

wherein a molar ratio of a total amount of (B) to the naphthalene ring-containing monomer unit in (A) is 0.4% or more and 30% or less,

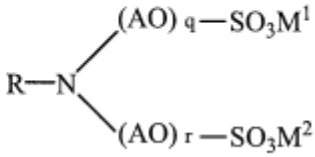
[Chemical Formula 6]



(B1)



(B2)



(B3)

wherein:

R is a hydrophobic group containing a carbon atom;

AO is an alkyleneoxy group having a carbon number of 2 or more and 4 or less;

p represents an average number of AO moles added and is 1 or more and 200 or less;

q and r are the same or different and each represents an average number of AO moles added and is 0 or more, and q+r is 1 or more and 200 or less;

M, M^1 and M^2 are the same or different and each represents a counter ion; and

X^1 and X^2 are the same or different, and each represents a hydrogen atom or a hydrocarbon group having a carbon number of 1 or more and 4 or less.

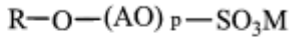
13. The dispersant composition for an inorganic powder according to Claim 12, further comprising (C) an antifoaming agent.

14. The dispersant composition for an inorganic powder according to Claim 12 or 13, wherein (A) is a formaldehyde naphthalenesulfonate condensate or a salt thereof.

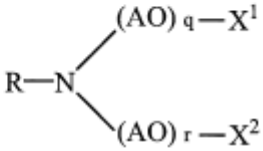
15. Use of a composition as a dispersant for a hydraulic composition, the composition comprising: (A) a polymer compound having a naphthalene ring-containing monomer unit; and (B) one or two or more compounds selected from a compound represented by the following general formula (B1), a compound represented by the following general formula (B2) and a

compound represented by the following general formula (B3), wherein a molar ratio of a total amount of (B) to the naphthalene ring-containing monomer unit in (A) is 0.4% or more and 30% or less,

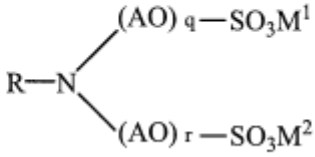
[Chemical Formula 7]



(B1)



(B2)



(B3)

wherein:

R is a hydrophobic group containing a carbon atom;

AO is an alkyleneoxy group having a carbon number of 2 or more and 4 or less;

p represents an average number of AO moles added and is 1 or more and 200 or less;

q and r are the same or different and each represents an average number of AO moles added and is 0 or more, and q+r is 1 or more and 200 or less;

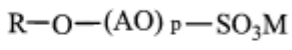
M, M^1 and M^2 are the same or different and each represents

a counter ion; and

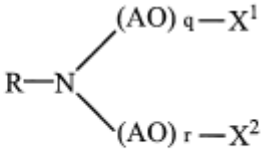
X^1 and X^2 are the same or different, and each represents a hydrogen atom or a hydrocarbon group having a carbon number of 1 or more and 4 or less.

16. Use of a composition as a hydraulic composition, the composition comprising a hydraulic powder, water, (A) a polymer compound having a naphthalene ring-containing monomer unit, and (B) one or two or more compounds selected from a compound represented by the following general formula (B1), a compound represented by the following general formula (B2) and a compound represented by the following general formula (B3), wherein a molar ratio of a total amount of (B) to the naphthalene ring-containing monomer unit in (A) is 0.4% or more and 30% or less,

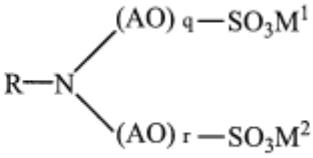
[Chemical Formula 8]



(B1)



(B2)



(B3)

wherein:

R is a hydrophobic group containing a carbon atom;

AO is an alkyleneoxy group having a carbon number of 2 or more and 4 or less;

p represents an average number of AO moles added and is 1 or more and 200 or less;

q and r are the same or different and each represents an average number of AO moles added and is 0 or more, and q+r is 1 or more and 200 or less;

M, M^1 and M^2 are the same or different and each represents a counter ion; and

X^1 and X^2 are the same or different, and each represents a hydrogen atom or a hydrocarbon group having a carbon number of 1 or more and 4 or less.