CLAIMS

[Claim 1]

A lubricating oil composition, comprising:

a base oil (A) that satisfies the following requirements (A-1) to (A-4); and

a polymer (B) that satisfies the following requirements (B-1) and (B-2):

・ Requirement (A-1): 100ºC kinematic viscosity is 2.0 mm^2/s or more and less than 7.0 mm^2/s.

・ Requirement (A-2): Viscosity index is 100 or more.

・ Requirement (A-3): Content of cycloparaffin, as measured according to ASTM D 2786-91(2016), is 35.0% by volume or less based on the total amount, 100% by volume of the base oil (A).

・ Requirement (A-4): %CA is less than 1.0.

・ Requirement (B-1): Ratio of the mass-average molecular weight (Mw) to the number-average molecular weight (Mn), [Mw/Mn] is 1.0 or more and less than 6.0.

・ Requirement (B-2): Ratio of the peak integral value (I_{10}) at a chemical shift 10.0 to 11.0 ppm to the peak integral value (I_{14}) at a chemical shift 13.5 to 14.5 ppm, as determined in ^{13}C-NMR analysis, [I_{10}/I_{14}] is 0.05 or more;

wherein polymer (B) is a polyalkyl (meth)acrylate polymer containing an alkyl (meth)acrylate-derived structural unit and the mass-average molecular weight (Mw) of polymer (B) is 100,000 to 700,000.

[Claim 2]

The lubricating oil composition according to claim 1, wherein the content of the base oil (A) is, based on the total amount, 100% by mass of the lubricating oil composition, 50.0% by mass or more and 99.9% by mass or less.

[Claim 3]

The lubricating oil composition according to claim 1 or 2, wherein the base oil (A) is a base oil grouped in Group II or Group III in the API category.

[Claim 4]

The lubricating oil composition according to any one of claims 1 to 3, wherein the base oil (A) further satisfies the following requirement (A-5):

・ Requirement (A-5): The content ratio of a monocyclic cycloparaffin content (R1) to the total of a dicyclic to hexa-cyclic cycloparaffins content (R2-6),

[(R1)/(R2-6)], as measured according to ASTM D 2786-91(2016), is 1.0 or less by volume.

[Claim 5]

The lubricating oil composition according to any one of claims 1 to 4, wherein the base oil (A) further satisfies the following requirement (A-6):

・ Requirement (A-6): The content of a tricyclic cycloparaffin (R3), as measured according to ASTM D 2786-91(2016), is less than 4.0% by volume based on the total amount, 100% by volume of the base oil (A).

[Claim 6]

The lubricating oil composition according to any one of claims 1 to 5, wherein the ratio [I_{10}/I_{14}] of the component (B) is 0.05 or more and 5.00 or less.

[Claim 7]

The lubricating oil composition according to any one of claims 1 to 6, wherein the content of the component (B) is 0.1% by mass or more and 30.0% by mass or less, based on the total amount, 100% by mass of the lubricating oil composition.

[Claim 8]

The lubricating oil composition according to any one of claims 1 to 7, wherein the total content of the base oil (A) and the component (B) is 70.0% by mass or more and 100% by mass or less, based on the total amount, 100% by mass of the lubricating oil composition.

[Claim 9]

The lubricating oil composition according to any one of claims 1 to 8, wherein the 100°C kinematic viscosity is 1.0 mm^2/s or more and 15.0 mm^2/s or less.

[Claim 10]

The lubricating oil composition according to any one of claims 1 to 9, wherein the viscosity index is 300 or more.