CLAIMS

[Claim 1]

A lubricating oil composition for a trunk piston diesel engine, comprising:

a base oil with a kinematic viscosity at 100°C of 5 mm^2/s to 16 mm^2/s including:

(A) 50% by mass or more, in terms of total content of the base oil, of a mineral lubricating base oil with a saturated hydrocarbon content of 90% by mass or more, a sulfur content of 0.03% by mass or less in terms of element content, a viscosity index of 80 or more, and a kinematic viscosity at 100°C of 3 mm^2/s to 35 mm^2/s; and

(B) 20% by mass to 50% by mass, in terms of total content of the base oil, of a mineral lubricating base oil (B2) with a saturated hydrocarbon content of less than 90% by mass, a sulfur content exceeding 0.03% by mass in terms of element content, and a kinematic viscosity at 100°C of 30 mm^2/s or more,

the base oil being compounded with:

(D) a metallic detergent; and

(E) an ashless dispersant.

[Claim 2]

A lubricating oil composition for a trunk piston diesel engine, comprising:

a base oil with a kinematic viscosity at 100°C of 5 mm^2/s to 16 mm^2/s including:

(A) a mineral lubricating base oil with a saturated hydrocarbon content of 90% by mass or more, a sulfur content of 0.03% by mass or less in terms of element content, a viscosity index of 80 or more, and a kinematic viscosity at 100°C of 3 mm^2/s to 35 mm^2/s;

(B) 5% by mass to 90% by mass, in terms of total content of the base oil, of an extract (B1) yielded as a by-product during solvent refining in a mineral lubricating base oil manufacturing process, the extract (B1) containing 15% to 50% of aromatic hydrocarbon compounds ($\%C_A$) according to a composition analysis method stipulated in ASTM D2140; and

(C) a polybutene-based synthetic oil or a hydride thereof with a kinematic viscosity at 100°C of 60 mm^2/s or more,

the base oil being compounded with:

(D) a metallic detergent; and

(E) an ashless dispersant.

[Claim 3]

The lubricating oil composition for a trunk piston diesel engine according to claim 2, wherein component (B) is an extract with a PCA content of less than 3% by mass.

[Claim 4]

The lubricating oil composition for a trunk piston diesel engine according to claim 2 or 3, wherein component (B) is an extract with an MI value of less than 1.0, a benzo[a]pyrene content of 1 mg/kg or less, and a particular aromatic compound (PAH) content of 10 mg/kg or less.

[Claim 5]

The lubricating oil composition for a trunk piston diesel engine according to any one of claims 1 to 4, wherein a bicyclic or higher aromatic content included in the base oil is 2% by mass or more.

[Claim 6]

The lubricating oil composition for a trunk piston diesel engine according to any one of claims 1 to 5, wherein kinematic viscosity at 100°C is 5.6 mm^2/s to 16.3 mm^2/s, and a base number is 9 mg KOH/g to 55 mg KOH/g (perchloric acid method).