[NAME OF DOCUMENT] CLAIMS

[Claim 1]

An ink composition for screen printing, which is an ink composition for high-quality/high-definition screen printing that, when producing printed matter by screen printing onto an object to be printed using a 360-mesh screen printing plate formed by a high-strength, non-deforming stainless steel mesh with a filament diameter of 25 μm, produces printed matter with a printed image edge spreading width of no more than 10 μm from the image design dimensions of the printing plate, the ink composition for screen printing containing a solvent with a boiling point of 170°C or higher at 70 wt% or greater of the total solvent, and a prepolymer or polymer with a weight-average molecular weight of 2000 or greater at 2 wt% or greater with respect to the total ink composition, and having a viscosity of 30 to 180 Pa·s as measured with a BH-type rotating viscosimeter at 25°C, and a thixotropic index (TI) of 2.0 to 8.0.

[Claim 2]

The ink composition for screen printing according to Claim 1, wherein the ink composition has a measured flow radius value of 14.0 to 19.0 mm after 1 minute from the start of measurement by a flow property measuring method using a spread meter at 25°C according to JIS K5701-1:2000.

[Claim 3]

The ink composition for screen printing according to Claim 1 or 2, wherein the ink composition satisfies "F60" - "F45" ≦ 1.0 mm, where "F60" is defined as the measured flow radius value after 1 minute and "F45" is defined as the measured flow radius value after 45 seconds from the start of measurement by the flow property measuring method using the spread meter.

[Claim 4]

The ink composition for screen printing according to any one of Claims 1 to 3, wherein the ink composition contains at least one coloring material, extender pigment or filler, or a combination thereof, the coloring material, extender pigment and filler are dispersed in the ink composition with a mean particle size of no greater than 35 μm.

[Claim 5]

The ink composition for screen printing according to any one of Claims 1 to 4, wherein the ink composition is an ink composition for graphic decorative screen printing.

[Claim 6]

The ink composition for screen printing according to any one of Claims 1 to 4, wherein the ink composition is an ink composition for screen printing to be used for black matrix, black stripe, resist pattern, spacer or light guiding panel

dot formation.

[Claim 7]

The ink composition for screen printing according to any one of Claims 1 to 4, wherein the ink composition contains a filler with a conductive property, and the filler is dispersed in the ink composition with a mean particle size of no greater than 10 μm.

[Claim 8]

Printed matter produced by screen printing onto an object to be printed using the ink composition for screen printing according to any one of Claims 1 to 7.

[Claim 9]

A method for producing printed matter, wherein printed matter is produced by the screen printing ink composition for screen printing onto an object to be printed according to any one of Claims 1 to 7.

Claims

[Claim 1]

An ink composition for screen printing,

wherein the ink composition has a measured flow radius value of 14.0 to 19.0 mm after 1 minute from the start of measurement by a flow property measuring method using a spread meter at 25°C according to JIS K5701-1:2000, and wherein the ink composition satisfies "F60" - "F45" ≦ 1.0 mm, where "F60" is defined as the measured flow radius value after 1 minute and "F45" is defined as the measured flow radius value after 45 seconds from the start of measurement by a flow property measuring method using the spread meter,

the ink composition for high-quality/high-definition screen printing is one that, when producing printed matter by screen printing onto an object to be printed using a 360-mesh screen printing plate formed by a high-strength, non-deforming stainless steel mesh with a filament diameter of 25 μm, produces printed matter with a printed image edge spreading width of no more than 10 μm from the image design dimensions of the printing plate,

the ink composition for screen printing containing a solvent with a boiling point of 170°C or higher at 70 wt% or greater of the total solvent, and a prepolymer or polymer with a weight-average molecular weight of 2000 or greater at 2 wt%

or greater with respect to the total ink composition, and

having a viscosity of 30 to 180 Pa·s as measured with a BH-type rotating viscosimeter at 25°C, and a thixotropic index (TI) of 2.0 to 8.0.

[Claim 2]

The ink composition for screen printing according to Claim 1, wherein the ink composition contains at least one coloring material, extender pigment or filler, or a combination thereof, the coloring material, extender pigment and filler are dispersed in the ink composition with a mean particle size of no greater than 35 μm.

[Claim 3]

The ink composition for screen printing according to Claim 1 or 2, wherein the ink composition is an ink composition for graphic decorative screen printing.

[Claim 4]

The ink composition for screen printing according to Claim 1 or 2, wherein the ink composition is an ink composition for screen printing to be used for black matrix, black stripe, resist pattern, spacer or light guiding panel dot formation.

[Claim 5]

The ink composition for screen printing according to Claim 1 or 2, wherein the ink composition contains a filler

with a conductive property, and the filler is dispersed in the ink composition with a mean particle size of no greater than 10 μm.

[Claim 6]

Printed matter produced by screen printing onto an object to be printed using the ink composition for screen printing according to any one of Claims 1 to 5.

[Claim 7]

A method for producing printed matter, wherein printed matter is produced by the screen printing ink composition for screen printing onto an object to be printed according to any one of Claims 1 to 5.