

Ink Composition for High-Quality/High-Definition Screen
Printing, Printed Matter Produced by the Screen Printing
Ink Composition, and Method For Producing the Printed Matter

[NAME OF DOCUMENT] ABSTRACT

[Abstract]

[Problem]

With the increasing diversity of printed matter design and higher definition of printed images by screen printing on electric and electronic parts and screen printing for graphics decoration in recent years, demand is increasing for more convenient and lower cost production of printed matter comprising both fine patterns and wide-area solid patterns. Also desired is higher quality and higher definition of the visibility of printed images that comprise both fine patterns and solid patterns, by improving the sharpness of the image edge sections in solid patterns while also obtaining a satisfactory leveling property.

[Solution Means]

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 on 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 of 2.0 to 8.0.

[No Fig.]