

# NIPPON GOKIN SFGM

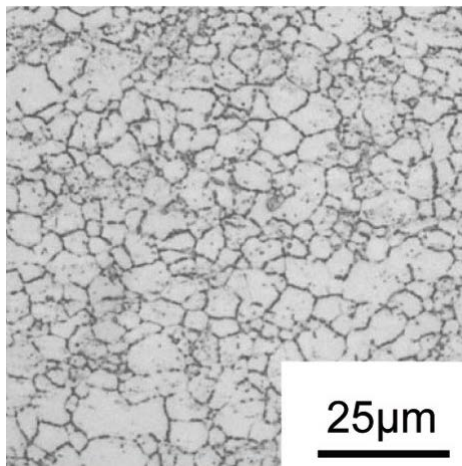
## Semi Fine Grain Microstructure for advanced laser & etched Stencils



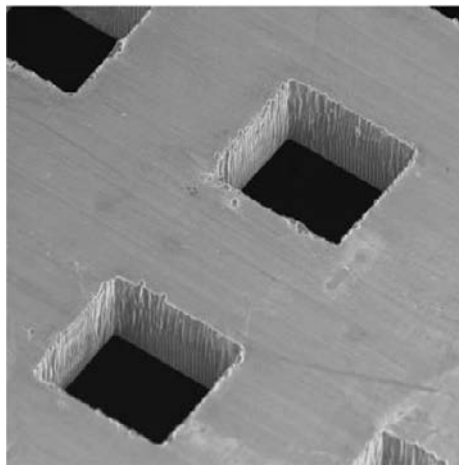
### DATASHEET

#### Chemical Composition

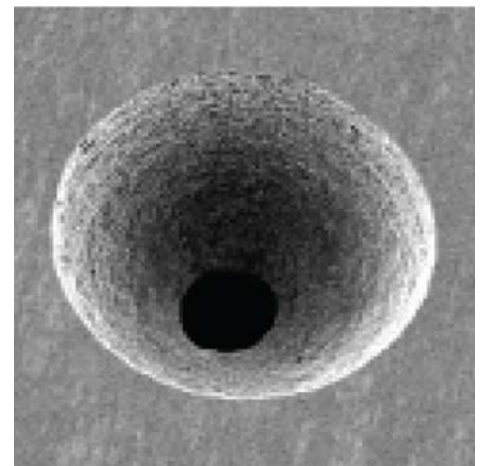
304H % Mass	Carbon (C)	Silicon (Si)	Manganese (Mn)	Phosphorus (P)	Sulfur (S)	Chromium (Cr)	Nickel (Ni)	Iron (Fe)
Min	-	-	-	-	-	18.00	8.00	Bal
Max	0.08	1.00	2.00	0.045	0.03	20.00	10.50	



2~5µm molecular grain size



Defined laser cutting edges



Stable etching properties

#### Mechanical Properties

Hardness (HV)	Yield Strength (MPa)	Tensile Strength (MPa)	Elongation (%)	Grain Size (µm)	Available Thickness (mm)	Available Sizes (mm)
370 ~ 410	≥ 800	≥ 1050	≥ 5	2 ~ 5	0.080 ~ 0.500 Tolerance: ±4%	Width: ≤610 ±0.1 Length: Any ±1

#### Product Brief

Nippon Gokin's SFGM is a semi fine grain microstructure alloy which is designed for advanced stencils used in the SMT and etching industry. This stainless steel alloy was developed as an alternative to traditional SUS304 used to make stencils. SUS304 has a grain size of 20~30µm whereas SFGM has a grain size of 2~5µm giving it a composition very close to FGM alloys but at a very much lower price point. This gives fabricators the opportunity to offer a much better quality product.

SFGM also has very good etching characteristics. Due to its stress relieving properties field tests show that etched jobs do not experience the effect of warping.

